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MEHMET ALİ AYDINLAR ÜNİVERSİTESİ
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Acıbadem University Health Sciences Journal is indexed in ULAKBİM TR Dizin, EBSCO and Türkiye Atıf Dizini.

Cover image: Prof. Dr. Erkmen Böke (1939-2014):

He was born in Izmir in 1939. He graduated from Ankara University Faculty of Medicine in 1962. In 1970, he received his General Surgery specialty from Heidelberg University, Germany. After returning to Turkey, General Surgeon at Hacettepe University in 1970, also in 1973, took/finished the Thoracic and Cardiovascular Surgery Specialty. He was appointed Associate Professor in 1976 and Professor in 1982 at the same university. Between 1982-1988, he worked as the Chief Physician of Hacettepe University Hospitals. Speaking German and English, Prof. Dr. Böke is married and has two children.

Prof. Dr. Böke opened his firsttwo personal oil painting exhibitions at Hacettepe University Ahmet GÖĞÜŞ Art Gallery in 2005 and 2007, the third one at the Arsuz İskender Sayek House under the name "Flowers of FÜSUN" and the fourth one at the Ankara Elele Art Gallery in 2011. Prof. Dr. Erkmen Böke participated in seven group exhibitions.

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SAĞLIK BİLİMLERİ DERGİSİ

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• *The names in the list above are alphabetized by last name.*

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OCTOBER
10-12, 2024

WYNDHAM GRAND
ISTANBUL LEVENT
TÜRKIYE

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BREASTANBUL 2024

THE CONFERENCE

SCIENTIFIC PROGRAMME

BREASTANBUL2024
THE CONFERENCE

Oct 10th 2024		HALL A
		Breast Surgery Educational Sessions
08:00	**12:00**	**Session I: Live Surgery**
		Introduction
		Cihan Uras, Bahadir M. Gulluoglu
		LIVE SURGERY
		Moderators (at the Hall): Shawna Willey, Yazan Masannat
		Moderator (at the Operating Room): Hasan Karanlik
		Surgeons/Tutors: Farid Meybodi, Omar Z. Youssef, Cihan Uras, Halil Kara, A. Enes Arikan, Erdem Guven
		Case at Theatre 1: SSM/NSM with subpectoral/prepectoral implant reconstruction with or without meshes/ADMs
		Case at Theatre 2: Therapeutic mammoplasty
12:00	**12:40**	**SATELLITE SYMPOSIUM** Medtronic Mastering surgical precision: The power of ligasure Moderator: Hany Ellithy Speaker: Jeffrey Bruce Dunne
12:40	**13:10**	**Session II: Video Surgery** **Robotic Breast Surgery** Chairs: Necati Ozen, Mustafa Tukenmez
		Speaker: Tulin Cil
13:10	**14:00**	**LUNCH**
14:00	**16:00**	**Breastics24h Session: Oncoplastic Breast Surgery: Volume Displacement** Breastics24h Breast Oncoplastics Chairs: Sibel Ozkan Gurdal, Kemal Atahan
14:00	14:15	In the mind of the oncoplastic surgeon: Key points of decision-making
		Ashutosh Kothari
14:15	14:30	How to choose the best technique according to the patient
		Yazan Masannat
14:30	14:45	Extreme and difficult oncoplastic cases
		Omar Z. Youssef
14:45	15:00	Symmetrization: When and how?
		Maher Hassan
15:00	15:15	Multidisciplinary approach and intraoperative radiotherapy: Opinion of the radiation oncologist
		Merdan Fayda
15:15	15:30	Complications: Prevention and treatment
		SVS Deo

BREASTANBUL THE CONFERENCE | Acibadem Üniversitesi Sencloji Araştırma Enstitüsü | SENATURK Sencloji Akademisi | Europa Donna Turkey | Pembe İzler Kadın Kanserleri Derneği | MDOD Multidisciplinary Oncology Society | Genç Birikim Derneği

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15:30	16:00	PANEL: Critical oncoplastic thinking
		Moderators: Hasan Karanlik, Atakan Sezer
		Discussants: Pedro F. Gouveia, Andreas Karakatsanis, Gaurav Agarwal, Merdan Fayda
16:00	**16:30**	**COFFEE BREAK**
16:30	**18:30**	**Session IV: Breast Surgeons of Australia & New Zealand (BreastSurgANZ) Session:** **Chest Wall Perforator Flaps** Chairs: Melanie Walker, Elisabeth Elder
16:30	16:45	The anatomic basis and marking of chest wall perforator flaps (CWPF)
		Peter Barry
16:45	17:00	How have perforator flaps changed my practice?
		Peter Barry
17:00	17:15	CWPF: Surgical options and practical tips
		Peter Chin
17:15	17:30	Perforator flap in the small breast: How to make it work?
		Peter Chin
17:30	17:45	The modification of the CWPF
		Elisabeth Elder
17:45	18:00	When to replace and when to displace?
		Farid Meybodi
18:00	18:15	CWPF training, curriculum and the Australian/New Zealand experience
		Melanie Walker
18:15	18:30	Q&A / Discussion
18:45	19:00	Opening Remarks
		Cihan Uras
19:00	19:45	Opening Conference
		Chairs: Hilal Unal, Nil Molinas Mandel
		Towards eliminating mastectomy: Interdisciplinary progress in breast conservation
		Michael Gnant
19:45		Welcome Reception

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Oct 10th 2024		HALL B
		ESTRO-ENDORSED MULTIDISCIPLINARY COURSE ON BREAST CANCER
		Course director: Philip Poortmans (BE) Local organisers: Nuran Bese (TR), Evrim Tezcanlı (TR), Serap Yucel (TR) Faculty: Senem Alanyali (TR), Maja Maraldo (DM), Icro Meattini (IT), Surgeon faculty: Nicola Rocco (IT), M. Umit Ugurlu (TR)
11:00	**13:00**	**Session I: Actual Topics in Radiation Oncology (RO) for Breast Cancer**
11:00	11:05	Introduction to the course
		Philip Poortmans
11:05	11:25	Modern treatment techniques: What is really needed?
		Senem Alanyali
11:25	11:45	How to set up a RO department
		Icro Meattini
11:45	12:05	Quality management in RO: The Danish example
		Maja Maraldo
12:05	12:25	Are there still indications for 2Gy/day fractionation schedules?
		Nuran Bese
12:25	12:45	How to prevent morbidity while preserving oncological safety?
		Evrim Tezcanli
12:45	13:00	Clinical case discussion of a contemporary patient
		Discussants: All faculty
13:00	**14:00**	**LUNCH**
14:00	**16:00**	**Session II: Contouring: Breast, Chest Wall and Boost**
14:00	14:20	The chest wall
		Philip Poortmans
14:20	14:40	The chest wall after reconstruction
		Philip Poortmans
14:40	15:00	The breast
		Senem Alanyalı

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15:00	15:20	The boost
		Nuran Bese
15:20	15:40	The boost after oncoplastic surgery
		Senem Alanyalı
15:40	16:00	The surgeon's perspective
		M. Umit Ugurlu
16:00	**16:30**	**COFFEE BREAK**
16:30	**18:30**	**Session III: Contouring: Lymph Node Regions**
16:30	17:00	Axilla levels 1-4 and internal mammary
		Evrim Tezcanli
17:00	17:30	Dose objectives for target volumes and constraints for organs at risk
		Maja Maraldo
17:30	18:00	The surgeon's perspective
		Nicola Rocco
18:00	18:30	Concluding discussion based on clinical cases including contourings and treatment plans
		Discussants: All faculty

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Oct 10th 2024		HALL C
08:30	**08:45**	**Breast Care Nursing Course** Course Directors: Ayla Gursoy, Sevil Guler
		Opening & Introduction
08:45	**10:30**	**Session I: Nursing Management in Breast Cancer Care** Chairs: Ayla Gursoy, Sevil Guler
08:45	09:15	Breast cancer: From awareness to access
		Maria Noblet
09:15	09:45	A nurse is a nurse? Effectiveness of specialised nursing in breast cancer
		Claire Ryan
09:45	10:15	Breast nursing: Recent past, present and future research directions
		Claire Ryan
10:15	10:30	Q&A / Discussion
10:30	**11:00**	**COFFEE BREAK**
11:00	**13:00**	**Session II: Communication Skills** Chairs: Maria Noblet, Claire Ryan
11:00	11:30	The challenge of truth-telling in cancer care
		Gizem Sahin Bayindir
11:30	12:00	Nurses' communication of trust, care and respect in breast cancer
		Yasemin Nazli
12:00	12:30	The nurse and genetic counseling and testing for breast cancer risk
		Celia Diez de los Rios
12:30	12:50	Family processes and effective communication in hereditary cancer syndromes
		Celia Diez de los Rios
12:50	13:00	Q&A / Discussion
13:00	**14:00**	**LUNCH**
14:00	**16:00**	**Session III: Symptoms Management** Chairs: Derya Subasi Sezgin, Ayla Gursoy
14:00	14:30	Is symptom management in breast cancer treatment influenced by patient characteristics?
		Maria Noblet
14:30	15:00	Non-pharmacological psychosocial symptom management: Evidence-based practices
		Claire Ryan

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15:00	15:30	Non-pharmacologic physical symptom management: Evidence-based practices
		Evrim Tezcanli
15:30	15:50	Effect of cultural and political competent in breast cancer
		Esra Eren
15:50	16:00	Q&A / Discussion
16:00	**16:30**	**COFFEE BREAK**
16:30	**18:30**	**Session IV: Prospectives of Breast Cancer Care** Chairs: Ayla Gursoy, Sevil Guler
16:30	17:00	Breast cancer patient advocacy: Challenges, opportunities and patient outcomes
		Yakup Akyuz
17:00	17:30	The role of spirituality in women with breast cancer
		Seda Er
17:30	18:00	Global challenges in breast cancer: Ethical and legal issues
		Gurkan Sert
18:00	18:30	Q&A / Discussion & Closing Remarks
		Ayla Gursoy, Sevil Guler

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Oct 10th 2024		HALL D
		Breast Imaging Course
08:50	**09:00**	**Opening & Introduction** Gul Esen
09:00	**10:30**	**Session I: BIRADS update** Chair: Levent Celik
09:00	09:20	Mammography Aysenur Oktay Alfatli
09:20	09:40	Ultrasound Inci Kizildag Yirgin
09:40	10:00	Magnetic resonance imaging Pinar Balci
10:00	10:20	Contrast-enhanced mammography Sibel Kul
10:20	10:30	Q&A / Discussion
10:30	**11:00**	**COFFEE BREAK**
11:00	**13:00**	**Session II: Breast MRI and Contrast-Enhanced Mammography (CEM)** Chair: Aysenur Oktay Alfatli
11:00	11:20	Breast MRI as a screening tool Ritse Mann
11:20	11:40	Preoperative MRI: Why is it so important? Jean Seely
11:40	12:00	Role of MRI in neoadjuvant chemotherapy Fusun Taskin
12:00	12:20	Does CEM have a role for patients with increased risk? Julia Camps Herrero
12:20	12:40	How to implement CEM in clinical workflow? Sibel Kul
12:40	13:00	Q&A / Discussion
13:00	**14:00**	**LUNCH**

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14:00	**16:00**	**Session III: Ultrasonography**
		Chair: Fusun Taskin
14:00	14:20	Screening US: Why, how, who?
		Erkin Aribal
14:20	14:40	Multiparametric approach in clinical practice
		Serap Gultekin
14:40	15:00	Second-look US
		Gul Esen
15:00	15:20	Role of AI in US
		Nilgun Guldogan
15:20	15:40	Non-mass lesions on US: When should we biopsy?
		Onur Bugdayci
15:40	16:00	Q&A / Discussion
16:00	**16:30**	**SATELLITE SYMPOSIUM** SIEMENS Healthineers Exclude the maybes Speakers: Serap Gultekin, Alexandra Krumbügel
16:30	**18.30**	**Session IV: New developments** Chair: Norran Hussein
16:30	16:55	Artificial intelligence (AI) in cancer detection and risk stratification
		Ritse Mann
16:55	17:20	Role of AI in clinical practice: Case presentation
		Levent Celik
17:20	17:40	Breast CT
		Andreas Boss
17:40	18:00	Biopsy under CEM guidence
		Erkin Aribal
18:00	18:20	Q&A / Discussion

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Oct 11th 2024		HALL A
07:30	**08:30**	**Early Bird Expert Opinion Session-I: Surgical Planning & Technique Selection**
		Moderators: Giuseppe Catanuto, Nicola Rocco
		Discussants: Geok Hoon Lim, Jamila Alazhri, Elisabeth Elder, Leena Chagla
08:30	**10:30**	**Session I: Implant-Based Breast Reconstruction**
		Chairs: Selahattin Ozmen, Ugur Anil Bingol
08:30	08:45	Usage of dermal and capsular flaps in breast reconstruction
		Akin Yucel
08:45	09:00	Replacing shaped breast implants with round: Are outcomes better or worse?
		Erdem Guven
09:00	09:15	The reverse expansion: A new era for the breast expanders
		Filip Stillaert
09:15	09:30	Why we do less implant based breast reconstruction in Finland
		Sinikka Suominen
09:30	09:45	Change of algorithm in immediate implant based breast reconstruction
		Jian Farhadi
09:45	10:00	Current situation in breast implant – associated malignancies and breast implant disease
		Suhan Ayhan
10:00	10:30	Q&A / Discussion
10:30	**11:00**	**SATELLITE SYMPOSIUM** sanovis | POLYTECH Moderator: Mehmet Suhan Ayhan Polytech presentation (5 min.) Speaker: Karsten Hemmrich The new era of aesthetic breast reconstruction after mastectomy (25 min) Speaker: Barbara Cagli
11:00	**11:10**	**Fully wrap implants with ADM: Why?** Michail Sorotos
11:10	**11:30**	**COFFEE BREAK**
11:30	**13:00**	**Session II: Lymphedema & Management**
		Chairs: Cenk Demirdover, Anil Demiroz
11:30	11:45	New concepts in lymphedema
		Alphonse Taghian
11:45	12:00	Lymphedema prevention and management strategies in breast reconstruction
		Gemma Pons
12:00	12:15	The future of lymphedema surgery
		Jaume Masia
		DEBATE: Direct-to-Implant Reconstruction (DTI) & Postmastectomy Radiotherapy (PMRT)
12:15	12:30	DTI followed by PMRT is the preferred option
		Philip Poortmans

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12:30	12:45	DTI followed by PMRT is NOT the preferred option
		Burcu Celet Ozden
12:45	13:00	Human breast capsules from 5 different implant surfaces: Expectations vs reality
		Barbara Cagli
13:00	**14:00**	**LUNCH**
14:00	**16:00**	**Session III: Autologous Breast Reconstruction**
		Chairs: Serhan Tuncer, Bulent Sacak
14:00	14:15	Our experience in breast reconstruction and lymphedema with "Symani" robotic surgery
		Gemma Pons
14:15	14:30	Partial breast reconstruction using local tissue rearrangement
		Sinikka Suominen
14:30	14:45	How to avoid empty upper pole in autologous reconstruction
		Christoph Andree
14:45	15:00	Single- stage autologous breast reconstruction without monitor island
		Jian Farhadi
15:00	15:15	The lumbar flap in breast reconstruction
		Filip Stillaert
15:15	15:30	Salvage breast reconstruction failure: Strategies after total and major partial flap necrosis
		Christoph Andree
15:30	16:00	Key points to get a good aesthetic outcome after autologous breast reconstruction
		Jaume Masia
16:00	**16:30**	**SATELLITE SYMPOSIUM** innoblative® Moderator: Guldeniz Karadeniz Cakmak De-escalation of radiation for low-risk breast cancer using intra-operative ablation – Is it feasible? Speakers: Suzanne Klimberg (online), Cem Yilmaz
16:30	**17:00**	**COFFEE BREAK**
17:00	**18:45**	**Session IV: High Risk & Prevention** Chairs: Taner Korkmaz, Varol Celik
17:00	17:15	Approach to non-BRCA high-moderate risk genes
		Banu Arun
17:15	17:30	Building on hereditary gene panels: Polygenic risk score
		Ahmet Yesilyurt
17:30	17:45	Contralateral breast irradiation in BRCA carries: The enigma for physicians?
		Philip Poortmans
17:45	18:00	Q&A / Discussion
18:00	18:45	PANEL: Patients with pathogenic gene mutations
		Moderators: Basak Oyan Uluc, Cem Yilmaz
		Discussants: Banu Arun, Ahmet Yesilyurt, Evrim Tezcanli, Shawna Willey, Gul Esen, Mehmet Bayramicli

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Oct 11th 2024		HALL B
08:30	**10:30**	**Session I: Adjuvant Systemic Treatment in Early Disease-I** Chairs: Nil Molinas Mandel, Erdem Goker
08:30	08:50	How to define high risk in hormone-positive breast cancer (BC) and how to treat?
		Michael Gnant
08:50	09:10	Optimal use of targeted therapy approaches in triple negative early stage breast cancer
		Hope Rugo
09:10	09:30	De-escalation of systemic treatment in early stage HER2+ BC: What is next?
		Karima Oualla
09:30	09:50	What is the role of genomic tests for radiation oncologists?
		Maja Maraldo
09:50	10:10	Integrations of radiation therapy with targeted treatments for breast cancer (BC): The consensus
		Icro Meattini
10:10	10:30	Q&A / Discussion
10:30	**11:00**	**SATELLITE SYMPOSIUM** MSD INVENTING FOR LIFE The past and present of TNBC treatment Speaker: Yesim Eralp
11:00	**11:30**	**COFFEE BREAK**
11:30	**13:00**	**Session II: Adjuvant Systemic Treatment in Early Disease-II** Chairs: Handan Onur Topuzlu, Yasemin Kemal
		DEBATE: Genomic tests
11:30	11:45	There is a role for genomic tests in HR+, HER2-, N+ BC in premenopausal women
		Sema Sezgin Goksu
11:45	12:00	There is NO role for genomic tests in HR+, HER2-, N+ BC in premenopausal women
		Sana Al Sukhun
12:00	12:15	Q&A / Discussion
12:15	13:00	PANEL: Systemic treatment at adjuvant setting
		Moderators: Yesim Eralp, Mahmut Muslumanoglu Narrator: Orcun Can
		Discussants: Sitki Tuzlali, Icro Meattini, Arzu Oguz, Abdulaziz Al-Saif, Norran Hussein
13:00	**14:00**	**LUNCH**
14:00	**16:00**	**Session III: Neoadjuvant Systemic Treatment** Chairs: Idris Yucel, Sernaz Uzunoglu
14:00	14:15	Role of imaging in the prediction and determination of response
		Eva Fallenberg

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14:15	14:30	How to predict response to immunotherapy? Marleen Kok
14:30	14:45	Neoadjuvant endocrine treatment Karima Oualla
14:45	15:00	Q&A / Discussion
15:00	16:00	PANEL: Multidisciplinary breast cancer management at neoadjuvant setting Moderators: Ozlem Sonmez, Atakan Sezer Narrator: Elif Senocak Tasci Discussants: Didem Colpan Oksuz, Fatma Tokat, Hope Rugo, DG Vijay, Eva Fallenberg, Michalis Kontos, Ashutosh Kothari
16:00	**16:30**	**SATELLITE SYMPOSIUM** Valentis® for life Moderator: Varol Celik Multidisciplinary approach to Prosigna: How can intrinsic molecular subtypes guide therapeutic decisions for breast cancer patients? Speakers: Ozge Gumusay, Abeer Shaban
16:30	**17:00**	**COFFEE BREAK**
17:00	**18:45**	**SELECTED PAPERS** Chairs: Mehmet Velidedeoglu, Okan Avcı, Osman Köstek Discussants: Sebnem Orguc, Sahin Lacin, Sinem Eroglu
17:00	17:15	**OP-023/** A machine learning–derived clinical decision rule for the assessment of axillary lymph node status in breast cancer: The influence of primary tumor burden and US shear-wave elastography Kaan Celik
17:15	17:30	**OP-024/** Node marking techniques and targeted axillary dissection in cN1 patients undergoing neoadjuvant chemotherapy: Analysis of initial 546 participants in ATNEC trial (NCT04109079) Abeer M Shaaban
17:30	17:45	**OP-026/** Implant reconstruction: Findings from the Australian Breast Device Registry Melanie Walker
17:45	18:00	**OP-025/** Combined analysis of the NEOSENTITURK-trials MF18-02 and MF18-03 cohorts of clinically node-positive patients undergoing sentinel lymph node biopsy after neoadjuvant chemotherapy Neslihan Cabioglu
18:00	18:15	**OP-027/** Tumor microenvironment modulation by tumor-associated macrophages: Implications for neoadjuvant chemotherapy response in breast cancer Gizem Oner
18:15	18:30	**OP-028/** Elacestrant in various combinations in patients with estrogen receptor-positive, HER2-negative locally advanced or metastatic breast cancer: Preliminary data from ELEVATE, a phase 1b/2, open-label, umbrella study Hope Rugo
18:30	18:45	**OP-029/** EILEEN Study: A retrospective real-world analysis of response rates with ribociclib and endocrine therapy in postmenopausal hormone receptor-positive, human epidermal growth factor receptor 2-negative metastatic breast cancer Muhammet Ali Kaplan

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Oct 11th 2024		HALL C
08:30	**10:30**	**Session I: Genetic Risk Management in Breast Cancer (BC)** Chairs: Inci Gultekin, Serap Yucel
08:30	08:50	Genetic risk: 5W1H (Whom? what? when? where? and how?)
		Umut Altunoglu
08:50	09:10	Promoting healthy lifestyles in women at genetic mutation
		Celia Diez de los Rios
09:10	09:30	Fertility management in the patient with a genetic mutation
		Merve Tuncer
09:30	09:50	Patients' perspectives on genetic testing, expectations and coping methods
		Yasemin Uslu
09:50	10:10	Family-to-child communication in hereditary BC
		Celia Diez de los Rios
10:10	10:30	Q&A / Discussion
10:30	**11:00**	**SATELLITE SYMPOSIUM** Genekor Biyoteknoloji Genetik Hastalıklar Değerlendirme Merkezi Why and when to ask or not for Oncotype DX Speakers: Basak Oyan Uluc, Christos J. Markopoulos
11:00	**11:30**	**COFFEE BREAK**
11:30	**13:00**	**Session II: Metastatic Breast Cancer (BC) Nursing. A Challenging Grey Area** Chairs: Seref Komurcu, Derya Subasi Sezgin
11:30	11:50	Balancing the goals of care and treatment in the changing landscape of metastatic BC
		Maria Noblet
11:50	12:05	Current challenges of metastatic BC
		Claire Ryan
12:05	12:20	Courageous conversations with the patient and family
		Claire Ryan
12:20	12:35	Global research trends in palliative care for BC
		Gulbeyaz Can
12:35	12:55	Ethical, legal, and financial considerations in metastatic BC
		Gurkan Sert
12:55	13:00	Q&A / Discussion
13:00	**14:00**	**LUNCH**
14:00	**16:00**	**Session III: Young Women-Living With Breast Cancer (BC) In The Active Phase Of Life** Chairs: Yasemin Uslu, Perihan Guner

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14:00	14:20	Young patient living with BC
		Celia Diez de los Rios
14:20	14:40	Young women with BC: Treatment, care and nursing implications
		Maria Noblet
14:40	15:00	Oncofertility counseling & fertility preservation strategy: Good clinical practices
		Tevfik Yoldemir
15:00	15:20	Couples adjustment to BC
		Seda Er
15:20	15:40	Family models and cultural challenges in BC
		Claire Ryan
15:40	15:55	Mothering whilst living with BC
		Tugba Pehlivan Saribudak
15:55	16:00	Q&A / Discussion
16:30	**17:00**	**COFFEE BREAK**
17:00	**18:45**	**Session IV: Psycho-Oncological Perspectives of a Highly Neglected Topic** IPOS PANEL: Mental health of caregivers of cancer patients and crucial role of healthcare professionals in addressing it
		Moderators: Tania Estape, Ozan Bahcivan
		Discussants: Berna Sabrioglu, Ozan Bahcivan, Fiorita Poulakaki, Aslihan Kaya

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Oct 11th 2024		HALL D
08:30	**10:30**	**Oral Papers** Chairs: Onur Dulgeroglu, Ashutosh Mishra, Maher Hassan
08:30	08:45	**OP-001 /** Initial outcomes of a novel technique minimal scar mastectomy Nathalie Liew
08:45	09:00	**OP-002 /** Combined endoscopy-assisted muscle-sparing Latissimus Dorsi flap harvesting with lipofilling enhancement as a new volume replacement technique in breast reconstruction Yaseer Sayed Ahmed
09:00	09:10	**OP-003 /** Evaluating the efficacy and outcomes of Latissimus Dorsi flap reconstruction in breast cancer management: A 13-year audit Rajinder Saggu
09:15	09:30	**OP-004 /** In the era of chest wall perforator flaps: Complications encountered after 100 procedures performed Mahmoud A. Alhussini
09:30	09:45	**OP-005 /** Surgical and aesthetic outcomes of chest wall perforator transposition flaps in partial breast reconstruction Amit Kumar
09:45	10:00	**OP-006 /** Immediate lipofilling as a novel technique for volume replacement in oncoplastic breast conservative surgery Yaseer Sayed Ahmed
10:00	10:15	**OP-007 /** Can oncoplastic breast-conserving surgery be the gold standard method in breast cancer treatment? A comparative analysis Mehmet Olcum
10:15	10:30	**OP-008 /** Tumescent-assisted dissection in breast surgery: Retrospective cohort analysis Salman Al Shaibani
11:00	**11:30**	**COFFEE BREAK**
11:30	**13:00**	**Oral Papers** Chairs: Gunay Gurleyik, Aykut Soyder
11:30	11:45	**OP-009 /** Immediate breast reconstruction after nipple-sparing mastectomy with prepectoral implant placement supported by a partial coverage technique employing late absorbable synthetic mesh Merve Tokocin
11:45	12:00	**OP-010 /** Whole breast reconstruction from a real-world cancer surgeon's perspective: Revisiting the pedicled TRAM flap Esha Pai
12:00	12:15	**OP-011 /** Bipedicle deep inferior epigastric artery perforator flap for whole breast reconstruction: An institutional review Vineet Kumar
12:15	12:30	**OP-012 /** Direct-to-implant retropectoral dual plane approach with autologous inferior-based dermal flap: Does SPY-elite laser angiographic system reduce complication rates? Hasan Buyukdogan
12:30	12:45	**OP-013 /** Application of a single-use negative pressure wound therapy system and comparison with the use of standard dressings after tissue expander replacement surgery with breast implants: Assessment of surgical site complications and scar quality Maja Molska
12:45	13:00	**OP-014 /** Evaluation of biocompatibility of polycaprolactone-based materials in implant-based breast reconstructions: A rat model study Hamit Koç
13:00	**14:00**	**LUNCH**
14:00	**16:00**	**Oral Papers** Chairs: Urvashi Jain, Serap Yucel, Parvane Rustamova

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14:00	14:17	**OP-015 /** Long term results of breast cancer patients with BRCA1/2 mutations treated with radiotherapy Huseyin Mert Buyuktarakci
14:17	14:34	**OP-016 /** Axillary radiotherapy following metastatic sentinel lymph node biopsy for T1-2 breast cancer patients: Real-world data Berrak Ege Korkut
14:34	14:51	**OP-017 /** RADIOSO Milan trial: Clinical and organizational benefits of SCOUT Radar-Localization-System for non-palpable lesions Andrea Polizzi
14:51	15:08	**OP-018 /** Comparison of the effectiveness of the Magtrace®-magnetic marker with the fluorescence visualization technique in the detection of sentinel lymph nodes in breast cancer: Optimization of surgical treatment Maja Molska
15:08	15:25	**OP-019 /** Single center experience of the HOLOGIC LOCalizer System for localizing impalpable breast Lesions Wafaa Ghazali
15:25	15:42	**OP-021 /** Efficacy of clip placement to the metastatic lymph node before neoadjuvant chemotherapy in breast cancer: Do we still believe the profitability? Yeliz Emine Ersoy
15:42	15:59	**OP-022/** RDI index as a novel predictor of non-sentinel node positivity in ACOSOG Z0011 eligible breast cancer patients: Development of a prediction model Shafeek Shamsudeen
16:30	**17:00**	**COFFEE BREAK**
17:00	**19:00**	**SPONSORED SYMPOSIA & WORKSHOP: Navigation for Targeted Axillary Surgery** sirius medical Co-Chairs: Thörsten Kühn, Guldeniz Karadeniz Cakmak
17:00	17:15	Deescalating of axillary surgery in node-positive breast cancer after neoadjuvant chemotherapy: Methods and outcomes Neslihan Cabioglu
17:15	17:30	MALLORCA – Trial: Surgical MArker LocaLisation OR Clip and wire Application for targeted axillary dissection in node positive breast cancer patients Constanze Elfgen
17:30	17:45	Experience with Sirius Pintuition for targeted axillary dissection Cornelia Leo
17:45	18:00	CEM response staging and pre-operative imaging in breast and axilla surgery: An accessible alternative to breast MRI Erkin Aribal
18:00	19:00	Hands-on Practice: TAD/Axilla surgery with Pintiution & ICG on synthetic models surgitate Diagnostic Green
		Guldeniz Karadeniz Cakmak, Neslihan Cabioglu, Cornelio Leo, Thorsten Kühn, Leena Chagla

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Oct 12th 2024		HALL A
07:30	08:30	**Early Bird Expert Opinion Session-II: How to Avoid and Manage Surgical Complications?**
		Moderators: Yazan Masannat, Peter Barry
		Discussants: Peter Chin, Omar Z. Youssef, Susan Boolbol, Ashutosh Mishra
08:30	**10:30**	**BreastGlobal Session: Loco-regional Treatment After Neoadjuvant Systemic Treatment (NST)** Breast Global
08:30	09:05	PANEL: Neoadjuvant chemotherapy or endocrine treatment in postmenopausal HR+ breast cancer (BC) patients
		Moderator: Ashutosh Kothari
		Discussants: Peter Barry, Yazan Masannat, Anand Koppiker, Urvashi Jain, Sana Al Sukhun, Anusheel Munshi, Abeer Shaaban, Andreas Boss, Chintamani
09:05	09:15	Q&A / Discussion
09:15	09:30	Monitoring response to NST
		Peter Barry
09:30	09:45	Novel techniques in localization of tumors following NST
		Yazan Masannat
09:45	10:00	Breast-conserving surgery for locally advanced BC
		Anand Koppiker
10:00	10:15	Management of axilla after NST
		Urvashi Jain
10:15	10:30	Q&A / Discussion
10:30	**11:00**	**SATELLITE SYMPOSIUM** GILEAD Moderator: Gul Basaran Overcoming the challenges in metastatic breast cancer with Trodelvy Speakers: Sema Sezgin Goksu
11:00	**11:30**	**COFFEE BREAK**
11:30	**13:00**	**Session I: Extended Treatment After Neoadjuvant Systemic Treatment (NST)** Chairs: Fuat Demirelli, Nuran Bese
11:30	11:50	Evolution of loco-regional management in the neoadjuvant setting
		Meena Moran
11:50	12:05	Adjuvant systemic treatment approach in patients with non-pCR after NST
		Yesim Eralp
12:05	12:20	Emerging predictive biomarkers for an optimal approach to NST
		Erhan Gokmen

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12:20	12:30	Q&A / Discussion
12:30	13:00	PANEL: Neoadjuvant controversial issues related to non-pCR cases
		Moderators: Ozlem Er, Halil Kara Narrator: Abdulmunir Azizy
		Panelists: Meena Moran, Onur Bugdayci, Marleen Kok, William Jacot, Sophocles Lanitis
13:00	**14:00**	**LUNCH**
14:00	**16:00**	**Session II: Advanced Breast Cancer (BC)** Chairs: Nuri Karadurmus, Murat Dincer
14:00	14:20	Changing landscape of metastatic triple-negative BC treatment
		Marleen Kok
14:20	14:40	Evolution of ADCs in management of HR+ metastatic BC
		Devrim Cabuk
14:40	15:00	Treatment of metastatic HR+/HER- BC beyond CDK4/6 inhibitors
		William Jacot
15:00	15:10	Q&A / Discussion
15:10	16:00	PANEL: Solutions for challenging advanced BC cases
		Moderators: Gul Basaran, Ferah Yıldız Narrator: Melisa Celayir
		Discussants: Meral Gunaldi, Karima Oualla, SVS Deo, Ayfer Ay Eren
16:00	**16:30**	**SATELLITE SYMPOSIUM** Daiichi-Sankyo AstraZeneca Push the Paradigm with ENHERTU in the treatment of HER2 + mBC Speakers: Sercan Aksoy, Ozlem Er
16:30	**17:00**	**COFFEE BREAK**
17:00	**18:45**	**Session III: Ductal Carcinoma In Situ (DCIS)** Chairs: Abut Kebudi, Gul Alco
17:00	17:15	Biology of DCIS: Is there anything new for clinical application?
		Abeer Shaaban
17:15	17:30	Surgical treatment of DCIS
		Andreas Karakatsanis
17:30	17:45	Decision-making for RT in patients with DCIS
		Merdan Fayda
17:45	18:00	Q&A / Discussion
18:00	18:45	PANEL: Controversial DCIS cases
		Moderators: Anusheel Munshi, Evrim Tezcanli
		Discussants: Merdan Fayda, Fiorita Poulakaki, Erhan Gokmen, Serap Gultekin, Zerrin Calay
18:45		**CLOSING CEREMONY**

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Oct 12th 2024		HALL B
08:30	**10:30**	**Session I: Breast Imaging, Screening and Follow-up.** Chairs: Gul Esen, Norran Hussein
08:30	08:50	Screening of patients with increased risk
		Jean Seely
08:50	09:10	Radiological management of young patients with breast cancer
		Eva Fallenberg
09:10	09:30	Radiological management of patients at lactation and pregnancy
		Sebnem Orguc
09:30	10:30	PANEL: Radiological management of patients after treatment
		Moderator: Gul Esen, Norran Hussein
		Discussants: Jean Seely, Ritse Mann, Sebnem Orguc, Cornelia Leo
10:30	**11:00**	**SATELLITE SYMPOSIUM** "Since 1984" mediHtel HEALTHCARE GROUP Medko ONCOLOGY NETWORK Moderator: Fulya Agaoglu Full spectrum advance breast radiotherapy treatments; Helical TomoTherapy, SGRT and IORT Speaker: Serap Yucel Innovations in breast imaging and biopsy Speaker: Gul Esen Icten
11:00	**11:30**	**COFFEE BREAK**
11:30	**13:00**	**Session II: Emerging Technology for Breast Cancer (BC) Management.** Chairs: N. Zafer Canturk, Isik Aslay
11:30	11:45	Artificial intelligence (AI)-assisted breast imaging
		Ritse Mann
11:45	12:00	AI-assisted histopathology
		Abeer Shaaban
12:00	12:15	Anthropometry and breast-related quality of life: BMI and prediction of satisfaction with breast using machine learning algorithms
		Giuseppe Catanuto
12:15	12:30	Power of technology for breast irradiation: A resume for non-radiation oncologists
		Gul Alco
12:30	12:45	BC surgery with augmented reality
		Pedro F. Gouveia
12:45	13:00	Ablative technologies
		Jill Dietz
13:00	**14:00**	**LUNCH**

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14:00	**16:00**	**American Society of Breast Surgeons (ASBrS) Session: Loco-Regional Treatment in Early Disease** Chairs: Jill Dietz, Shawna Willey
14:00	14:15	Contralateral risk-reducing mastectomy
		Jill Dietz
14:15	14:30	Delayed sentinel node biopsy
		Shawna Willey
14:30	14:45	Considering co-morbidities and staged approach to oncoplastic breast surgery
		Abhishek Chatterjee
14:45	15:00	Radiation after oncoplastic breast surgery
		Meena Moran
15:00	15:15	Q&A / Discussion
15:15	16:00	PANEL: Loco-regional Treatment
		Moderator: Susan Boolbol
		Discussants: Jill Dietz, Shawna Willey, Meena Moran
16:30	**17:00**	**COFFEE BREAK**
17:00	**18:45**	**Session III: How to Manage Difficult Issues** Chairs: Ali Ilker Filiz, Ufuk Abacioglu, Ertugrul Gazioglu
17:00	17:18	Defining the group of patients with N1 disease who does not need axillary dissection? And the selection of RT volumes
		Anusheel Munshi
17:18	17:36	Loco-regional recurrence: Mastectomy or breast conservation?
		Leena Chagla
17:36	17:54	Cardio-Oncology: Prevention and follow up of cardiovascular functions during breast cancer treatment
		Elif Eroglu
17:54	18:12	Timing and approach to pregnancy during and after breast cancer diagnosis
		Umut Demirci
18:12	18:30	The flip side of endocrine therapy: Side effects, quality of life & adherence issues
		Ozge Gumusay
18:30	18:45	Q&A / Discussion

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Oct 12th 2024		HALL C
08:30	**10:30**	**Session: Survivorship-I** Chairs: Ukke Karabacak, Hulya Sisli
08:30	08:50	Survivor care plan present and future: How nurses can be developed
		Selda Rizalar
08:50	09:10	Thinking and living with cancer: Return to real life
		Gamze Temiz
09:10	09:30	Medication side effects management and adherence to hormone therapy
		Yasemin Uslu
09:30	09:50	Unmet needs in breast cancer survivors: Survivorship need assessment
		Sevil Guler
09:50	10:10	Physical symptom clusters in breast cancer survivors
		Berkay Alikan
10:10	10:30	Q&A /Discussion
10:30	**11:00**	**SATELLITE SYMPOSIUM** AGENDIA MAMMAPRINT+BLUEPRINT Moderator: Cengiz Yakicier Agendia MammaPrint and BluePrint gene expression profiling in early stage breast cancer: New data and expanded utility Speaker: M. William Audeh
11:00	**11:30**	**COFFEE BREAK**
11:30	**13:00**	**Session I: Survivorship-II** Endorsed by the International Psycho-Oncology Society Chairs: Tania Estape, Ozan Bahcivan
11:30	11:50	Health-related quality of life outcomes among breast cancer survivors
		Ayla Gursoy
11:50	12:10	Family resilience and psychological well-being
		Gizem Sahin Bayindir
12:10	12:30	Maintaining and promotion health in survivors: Evidence-based practices
		Sevil Guler
12:30	12:50	The elephant in the room: Fear of cancer recurrence and progression
		Tania Estape
12:50	13:00	Q&A / Discussion
13:00	**14:00**	**LUNCH**

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PI WOMEN'S CANCERS		
14:00	**15:20**	**Session I: The Last Goodbye: Departing in Peace From This World** Moderator: Ruya Atlibatur
14:00	14:20	Palliative care from medical perspective
		Volkan Aykac
14:20	14:40	Palliative care in terms of patient rights
		Muge Urem
14:40	15:00	Facing the Final Chapter of Life: Psychological Perspective
		Duygu Cap
15:00	15:20	Q&A / Discussion
15:25	**16:00**	**Session II: Laughter Therapy** Moderator: Halime Surek Kahveci
15:25	15:50	Laughter therapy: The healing power of laughter
		Sevilay Zorlu
15:50	16:00	Laughter therapy
16:30	**17:00**	**COFFEE BREAK**
17:00	**18:40**	**Session III** Moderator: Feyza Ozturk
17:00	17:15	Experience sharing: From being a patient to being a patient's relative
		Vildan Ortac
17:35	17:50	When to stop CARING: Unspoken boundaries
		Esra Ürkmez
18:05	18:20	Being a patient's relative: Is it a marathon or hundred meter sprint?
		Belma Kurdoğlu
18:20	18:40	Q&A / Discussion

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09:30	**11:00**	**SPONSORED SYMPOSIA: Holland Innovation Exchange in Breast Cancer Surgery** sirius medical · Government of the Netherlands Co-chairs: Leena Chagla, Erkin Aribal
09:30	**09:40**	Opening Arjen Uijterlinde Consul-General of the Kingdom of the Netherlands
09:40	**10:00**	Ultrasound and artificial intelligence for intraoperative margin assessment Behdad Dasht Bozorg NKI Amsterdam, NL
10:00	**10:20**	Technical Innovation in Breast Cancer surgery Anke Christenhusz TU Enschede, NL
10:20	**10:40**	Biomaterial for a personalized treatment in breast tissue regeneration Dan Jing Wu CEO VivArt-X, NL
10:40	**11:00**	Q&A / Discussion
11:00	**11:30**	**COFFEE BREAK**
11:30	**13:00**	**Oral Papers** Chairs: Nurullah Bakir, S. Ata Guler
11:30	11:45	**OP-030/** Effect of remote follow-up after breast cancer surgery with a mobile App on quality of life Sertaç Ata Güler
11:45	12:00	**OP-031/** The effects of patient education on limitations of the affected extremity and exercise compliance in patients undergoing surgery for breast cancer Perya Abbasoglu
12:00	12:15	**OP-032/** Assessment of shoulder dysfunction after axillary dissection: A prospective observational study Tarun Kumar
12:15	12:30	**OP-033/** The effect of manual lymph drainage in the treatment of breast edema that may occur in patients undergoing breast-conserving surgery and adjuvant radiotherapy: Randomized controlled study Faika Nur Erkol
12:30	12:45	**OP-034**/ Access to healthcare services for individuals living with triple-negative breast cancer: Perspectives of physicians, nurses and patients Gürkan Sert
12:45	13:00	**OP-035/** Prospective evaluation of the relationship between intestinal microbiota in cases diagnosed with breast cancer N Zafer Canturk
13:00	**14:00**	**LUNCH**
14:00	**16:00**	**Oral Papers** Chairs: Enes Arikan, Inci Kizildag Yirgin
14:00	14:15	**OP-036/** NACsome mapping with MRI mammogram: Paving the way for safer therapeutic mammaplasty and nipple-sparing mastectomy Aarcha Jaibi Thottappilly

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14:15	14:30	**OP-037/** Correlation of radiological and pathological tumor sizes in early-stage breast cancer based on molecular subtypes and presence of in situ carcinoma: A retrospective multicenter study Deniz Esin Tekcan Sanlı
14:30	14:45	**OP-038/** Enhancement kinetics analysis in contrast-enhanced spectral mammography: Region of interest versus visual assessment Miaad Al Attar
14:45	15:00	**OP-039/** Evaluation of the agreement between radiology and pathology results after neoadjuvant chemotherapy in breast cancer patients: Assessment of possible parameters affecting pathological complete response with pre-treatment breast MRI examination Enes Mustafa Misir
15:00	15:15	**OP-040/** Impact of omitting routine intraoperative frozen section in sentinel node biopsy for breast cancer Youmna Abdelaziz
15:15	15:30	**OP-041/** Novel evidence for designating breastfeeding as the starting point for idiopathic granulomatous mastitis: A large prospective multicentric case-control study Sadaf Alipour
15:30	15:45	**OP-042/** Whole-exome sequencing: Discovering genetic causes of Granulomatous Mastitis Beyza Ozcinar
15:45	16:00	**OP-043/** Comparison between two ex-vivo culture techniques of breast cancer tissue Elaine Borg
16:30	**17:00**	**COFFEE BREAK**
17:00	**18:45**	**Oral Papers** Chairs: Mustafa Bozkurt, Seyda Gunduz
17:00	17:15	**OP-044/** Are CDK inhibitors more effective in HER-2 negative breast cancer than in HER-2 low disease? Busra Bulbul
17:15	17:30	**OP-045/** Comparison of GenesWell BCT score with Oncotype DX recurrence score for risk classification in Turkish women with HR(+) / HER2(-) early breast cancer Ahmet Anil Sahar
17:30	17:45	**OP-046/** Real-life use and decision impact of Mammaprint on clinical practice in early breast cancer: A multicenter Turkish Oncology Group Study Melisa Celayir
17:45	18:00	**OP-047/** India's exploration of next-generation sequencing: Proteomics-based prognostic signature redefining the risk groups in HR+/HER2- breast cancer and comparative analysis with grade, Ki67 and Nottingham Prognostic Index Tanay Shah
18:00	18:15	**OP-048/** Real-world data on prognostication of early-stage breast cancer patients using CanAssist Breast: First immunohistochemistry-based prognostic test developed and validated on Asians Manjiri Manohar Bakre
18:15	18:30	**OP-049/** Real-life use of OncotypeDX and its impact on clinical outcome of premenopausal early breast cancer patients Gul Basaran
18:30	18:45	**OP-051/** Effect of HER2 status on pathological complete response after neoadjuvant chemo-immunotherapy in triple-negative breast cancer Elif Senocak Tasci

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ORAL PRESENTATIONS

[OP-001]
INITIAL OUTCOMES OF A NOVEL TECHNIQUE MINIMAL SCAR MASTECTOMY

Nathalie Liew[1], Geok Hoon Lim[1], John Carson Allen[2]
[1]Breast Department, KK Women's and Children's Hospital, Singapore
[2]Duke-NUS Medical School, Singapore

Introduction: Nipple sparing mastectomy is oncologically safe and has a good cosmetic outcome. However, nipple sparing mastectomy was conventionally performed with reconstruction. Minimal scar mastectomy (MSM) is a novel technique which could allow women, with non-ptotic breasts, who do not want reconstruction, to conserve their nipple areolar complex (NAC) and avoid the transverse scar associated with modified radical mastectomy. This is the first study on the initial oncologic and surgical outcomes of MSM.

Methods: MSM complications, recurrence rates and cosmetic outcomes were retrospectively assessed. The risk factors for NAC necrosis such as patient's comorbidities etc. were assessed. As MSM is a modification of the round block technique, the mean ring distance (MRD) which is the average of the distance between the inner and outer ring circumferentially were assessed. The factors affecting cosmetic outcome were assessed too.

Results: 17 patients and 18 breasts were included. There was no recurrence after a mean follow-up of 23.1 months (range: 2-50). NAC necrosis occurred in 8 cases (3 complete, 5 partial). Prediabetes (p=0.0128) and MRD >=1.5cm (p=0.0440) were statistically significant for NAC necrosis. Excluding the cases with known risk factors, NAC necrosis was 2/11 (18.2%). Of the available data, 11/15 (73.3%) rated the cosmetic outcome as excellent or good. NAC necrosis also correlated to poorer cosmetic outcome (p=0.006).

Conclusion: MSM is oncologically safe and is best performed in patients with no risk factors for NAC necrosis, including prediabetes and MRD <1.5cm. These pilot results will refine the selection criteria of patients for MSM.

Keywords: breast cancer, nipple sparing mastectomy, breast reconstruction, minimal scar mastectomy, nipple areola complex necrosis

[OP-002]
COMBINED ENDOSCOPY-ASSISTED MUSCLE-SPARING LATISSIMUS DORSI FLAP HARVESTING WITH LIPOFILLING ENHANCEMENT AS A NEW VOLUME REPLACEMENT TECHNIQUE IN BREAST RECONSTRUCTION

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Introduction: This study evaluated the feasibility and patient satisfaction of combined endoscopy-assisted muscle-sparing latissimus dorsi flap harvesting, with lipofilling enhancement for skin-preserving mastectomy. Methods. This is a prospective study that included 21 female patients with small breasts (cup size A-B), subjected to skin-preserving mastectomy as a management of breast cancer. Combined endoscopy-assisted muscle-sparing latissimus dorsi flap harvesting with lipofilling enhancement was performed for immediate breast reconstruction. Patients were followed up for early and late postoperative complications including recurrence for at least 24 months. Postoperative patient satisfaction was assessed using the Kyungpook National University Hospital breast reconstruction satisfaction questionnaire. Results. The study included 21 female patients with a mean age of 42.10 ± 8.46 years. Patients were followed up for 26.67 ± 3.38 months. The procedure was successful in all patients with a mean duration of 172.05 ± 28.22 minutes. Local recurrence was encountered in one patient (4.67%). Eighteen patients declared their satisfaction 6 months after the operation, while two patients were satisfied only after the second session of lipofilling. The overall postoperative patient satisfaction was 95.24%. The majority of the patients (93.3%) who underwent NSM surgery were satisfied, while only two-thirds (66.6%) of the patients who underwent SSM surgery were satisfied. Conclusions. Combined endoscopy-assisted muscle-sparing latissimus dorsi flap harvesting with lipofilling enhancement seems to be a feasible and encouraging technique for the volume adjustment of small breasts, especially in nipple-sparing mastectomy. It leaves a minor back scar and has an acceptable rate of postoperative complications. The procedure showed high postoperative patient satisfaction.

Keywords: breast cancer, latissimus drosi flap, endoscopic, lipoffiling

[OP-003]
EVALUATING THE EFFICACY AND OUTCOMES OF LATISSIMUS DORSI FLAP RECONSTRUCTION IN BREAST CANCER MANAGEMENT: A 13-YEAR AUDIT

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Introduction: Autologous reconstruction following mastectomy is a vital aspect of breast cancer management, offering both oncological safety and cosmetic benefits. The latissimus dorsi (LD) flap procedure is one such technique which is utilized widely. The LD-flap technique, is often undervalued in Western surgical contexts, it emerges as a crucial resource in low- and middle-income countries like India, where the involvement of both a plastic surgeon and breast surgeon can be financially prohibitive for patients, affirming LD flap's utility and versatility in the hands of a single onco-plastic surgeon. This audit aims to comprehensively analyze various parameters and outcomes within the LD-flap cohort from a single surgeon unit over a thirteen-year period.

Methods: A retrospective review of patients undergoing mastectomy with LD-flap reconstruction between 2010 and 2024 was conducted. Data collection encompassed various clinicopathological parameters. Additionally, a subset analysis of a genetics cohort was performed.

Results: 75 LD flap surgeries were audited from the center which happened during 2010-2024. The BREAST-Q PROMs showed good to excellent results across all modules, including physical appearance, sexual well-being, and psychological satisfaction. These surgeries were also audited for demographic distributions, prevalence of comorbidities, imaging characteristics, tumor site and size, preoperative interventions, surgical specifics including margins and lymph node status, intraoperative tumor weight, re-excision rates, postoperative complications (major and minor), adjuvant therapies, radiation therapy compliance, and various follow-up outcomes such as local recurrence, overall survival, disease-free survival, and physical assessment.

Conclusion: This comprehensive audit provided from the single surgeon center gives valuable insights into the LD-flap reconstruction cohort, highlighting demographic trends, surgical nuances, oncological outcomes, and patient-reported satisfaction. These findings may guide future clinical practices and inform tailored approaches to optimize patient care and satisfaction in mastectomy with autologous reconstruction with the help of LD flap.

Keywords: Autologous reconstruction, Mastectomy, LD flap

[OP-004]
IN THE ERA OF CHEST WALL PERFORATOR FLAPS: COMPLICATIONS ENCOUNTERED AFTER 100 PROCEDURES PERFORMED

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Background: chest wall perforator flaps (CWPF) have been an emerging oncoplastic tool in the past 10 years. considered as a volume displacement tool, it salvaged many breasts from being subjected to total mastectomy. CWPF include many techniques; thoracodorsal artery perforator flap (TDAP), lateral intercostal artery perforator flap (LICAP), anterior intercostal artery perforator flap (AICAP) and others. This study is a retrospective study aimed at reviewing the postoperative complications of all patients subjected to breast conserving surgery by any CWPF technique.

Methods: After obtaining required ethical approvals from our institution ethical committee, data registry of all patients subjected to BCS using CWPF technique were reviewed. This All complications encountered were noted including the way of management, readmission rate and reoperation.

Results: the study period extended from February 2019 till March 2024. 122 patients were included. Complications encountered in 22 patients (18%). These included: wound dehiscence 6 patients (4.92%), partial flap loss 2 patients (1.63%), total flap loss 1 patient (0.82%), wound seroma 9 patients (7.38%), wound infection 2 patients (1.63%) and fat necrosis 8 patients (6.56%).

Only the patient with total flap loss was readmitted for reoperation. All other patients were managed in the OP clinic.

Conclusion: CWPF complications are accepted even with the start of the learning curve. More concern is needed regarding the fat necrosis developing along the follow up of the patients.

Keywords: chest wall perforator flaps, oncoplastic, breast carcinoma

[OP-005]
SURGICAL AND AESTHETIC OUTCOMES OF CHEST WALL PERFORATOR TRANSPOSITION FLAPS IN PARTIAL BREAST RECONSTRUCTION

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Introduction: Breast-conserving surgery (BCS) has become the standard of care for early, localized breast cancer. However, the main challenge is balancing the oncological and aesthetic outcomes. According to the location of the breast tumor, various flap procurement and placement techniques have been devised. However, there is limited evidence evaluating the outcomes of perforator-based oncoplastic breast reconstruction.

Aims and objectives: To assess the surgical and aesthetic outcomes after partial breast reconstruction using chest wall perforator transposition flaps.

Methods: Sixty patients who had undergone partial breast reconstruction using chest wall perforator transposition flaps after January 2020 and completed one year of follow-up before June 2024 were included in the study. Data analysis was done from a prospectively maintained comprehensive database. Data on demographics, perioperative events, and surgical outcomes were recorded. Aesthetic outcomes reported by patients were collected using a Likert scale-based questionnaire.

Results: Mean age of study population was 46.1 years. Lateral intercostal artery perforator (LICAP), medial intercostal artery perforator (MICAP), and Anterior Intercostal Artery Perforator (AICAP) were performed in 54, 3, and 3 patients, respectively. The mean operative time for flap harvesting and insetting was 41, 23, and 25 minutes respectively. Postoperative surgical complications were graded according to the Clavien-Dindo classification. Six patients experienced minor wound dehiscence at the flap harvested site, three patients had partial skin island flap loss, one patient developed flap edema and six patients reported mild long-term pain at the flap harvested site. 59 patients completed adjuvant radiation therapy. 96.7% reported that they were satisfied with the scar, 98.3% felt comfortable going out in public, and 91.7% felt that the symmetry of the breasts was satisfactory.

Conclusion: Chest wall perforator transposition flaps for partial breast reconstruction are an excellent choice for immediate reconstruction offering quick recovery, low complication rates, high treatment compliance, and outstanding aesthetic outcomes.

Keywords: Breast cancer, Breast-conserving surgery, Partial breast reconstruction, Chest wall perforator transposition flaps

[OP-006]
IMMEDIATE LIPOFILLING AS A NOVEL TECHNIQUE FOR VOLUME REPLACEMENT IN ONCOPLASTIC BREAST CONSERVATIVE SURGERY

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Background: We aimed to evaluate the feasibility of immediate lipofilling as a volume replacement technique in breast conservative surgery (BCS) in terms of the volume of fat graft resorption after radiotherapy, patient satisfaction, and oncological safety.

Patients and Methods: This was a prospective study that included female patients with breast cancer, with small- or medium-sized breasts. The patients underwent BCS followed by lipofilling into the deformed areas away from the tumor site that resulted from direct closure of the tumor cavity. They were followed up for early and late postoperative complications, including recurrence. Volumetric computed tomography was performed before and after radiotherapy to determine percentage fat resorption. Postoperative patient satisfaction was assessed using the Kyungpook National University Hospital Breast Reconstruction Satisfaction Questionnaire.

Results: The study included 54 female patients with a mean age of 47.57 ± 9.26 years. The mean follow-up period was 31.02 ± 4.47 months. Local recurrence was observed in three patients (5.56%). The volume reduction of the injected fat graft ranged from 10.15% to 55.67%, with a mean of 29.27 ± 10.06%. Fifty-two patients (96.30%) reported postoperative satisfaction, and nine of them expressed satisfaction only after a second lipofilling session.

Conclusions: Immediate lipofilling as a volume replacement technique in BCS is a safe and simple technique without major complications. It has a locoregional recurrence rate similar to BCS alone, with an acceptable fat resorption percentage and high postoperative patient satisfaction.

Level of Evidence IV: This journal requires that authors assign a level of evidence to each article. For a full description of these Evidence-Based Medicine ratings, please refer to the Table of Contents or the online Instructions to Authors www.springer.com/00266.

Keywords: breast cancer, -lipofilling, volume replacement

[OP-007]
CAN ONCOPLASTIC BREAST-CONSERVING SURGERY BE THE GOLD STANDARD METHOD IN BREAST CANCER TREATMENT? A COMPARATIVE ANALYSIS

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Objective: Oncoplastic surgery refers to oncological surgery that utilizes plastic surgery techniques for reconstructive and cosmetic purposes. The advantage of oncoplastic surgery in breast cancer lies in achieving good cosmetic outcomes with wider tumor excision. The positive surgical margin rate in conventional breast-conserving surgery (BCS) is reported to be 12-59% in the literature. Oncoplastic BCS could be a safer and more cost-effective alternative to conventional BCS due to fewer re-excisions and better cosmetic results.

Materials-Methods: A retrospective, single-center comparative study was conducted by reviewing the medical records of patients from January 2021 to January 2024. Positive margins and re-excision rates, along with the average tumor size handled by both surgical procedures, were compared. Among 435 patients, 180 underwent Level II oncoplastic BCS and 255 underwent conventional BCS.

Results: The average age was 55. Positive surgical margins were observed in 14 (7.7%) patients in the oncoplastic BCS group, compared to 54 (21.2%) patients in the conventional BCS group. Consequently, 13 (7.2%) patients in the oncoplastic BCS group underwent re-excision, and 1 (0.5%) patient underwent mastectomy, whereas in the conventional BCS group, 48 (19%) patients underwent re-excision and 6 (2.2%) patients underwent mastectomy. The average tumor size was 2.4 (0-7) cm in the oncoplastic BCS group and 1.7 (0-6) cm in the conventional BCS group. Neoadjuvant therapy was received by 60 (33.3%) patients in the oncoplastic BCS group and 110 (43.1%) patients in the conventional BCS group. Oncoplastic BCS was performed on 25 (13.9%) patients with multifocal lesions, compared to 6 (2.3%) in the conventional BCS group.

Conclusion: Oncoplastic BCS is safer for multifocal masses and lesions with difficult anatomical locations due to its low re-excision rate and provides better cosmetic results. Our study suggests that oncoplastic BCS should be the gold standard method in modern times.

Keywords: oncoplastic BCS, conventional BCS, re-excision rates

[OP-008]
TUMESCENT-ASSISTED DISSECTION IN BREAST SURGERY: RETROSPECTIVE COHORT ANALYSIS

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Introduction: Tumescent dissection involves injecting a highly diluted solution of local anaesthetic with epinephrine and crystalloid into subcutaneous tissues of the. The resulting space enhances visibility and facilitates dissection, allowing the surgeon to differentiate between subcutaneous and glandular tissues. Using sharp scissors in this technique eliminates the need for electrocautery near the skin flaps, which could potentially damage soft tissues due to thermal energy dissipation.

Aim: This study aimed to compare the occurrence of complications and surgical outcomes between tumescent and non-tumescent techniques.

Methods: This retrospective cohort study included patients who underwent breast-conserving surgery with levels 1 and 2 oncoplastic techniques, nipple/skin-sparing mastectomy, and immediate implant-based reconstruction between January 2020 and December 2023. Patients were divided into two groups: one group underwent surgery with standard electrocautery (control group), while the other underwent surgery with Tumescent-assisted surgery (TA group). Patient demographics, procedural details, surgical outcomes, and complications were analysed using nonparametric statistical tests and logistic regression analysis.

Results: A total of 204 patients were included in the analysis (104 patients in the TA group and 100 in the control group). Patient demographics were similar between the two groups. Surgical time was shorter with TA compared to standard mastectomy (median 168 versus 207.5 minutes, $P = 0.016$). Additionally, there was a significant reduction in the need for re-excision of the margin in the TA group compared to the control group (9 versus 14, $P = 0.033$). The TA group also had a significant reduction in post-operative seroma compared to the control group (12 versus 3, $P = 0.003$). However, other complication rates were not statistically significant between the two groups.

Conclusions: TA Breast surgery is a safe alternative to standard technique in selected patients. Further surgical research to explore the role of TA breast surgery in a wider clinical setting is warranted.

Keywords: Tumscenet dissection, breast surgery, oncoplastic surgery

[OP-009]
IMMEDIATE BREAST RECONSTRUCTION AFTER NIPPLE-SPARING MASTECTOMY WITH PREPECTORAL IMPLANT PLACEMENT SUPPORTED BY A PARTIAL COVERAGE TECHNIQUE EMPLOYING LATE ABSORBABLE SYNTHETIC MESH

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Background: This study aimed to present the outcomes our experience with nipple sparing mastectomy (NSM) and single-stage with prepectoral implant placement and employing a fully-synthetic late absorbable mesh

Materials-Methods: The study retrospectively examined 62 patients and 78 breasts of NSM and single-stage direct-to-implant breast reconstruction with prepectoral implant placement supported by a partial coverage technique (PC) employing late absorbable synthetic mesh coverage of the implant.

Results: In a cohort of 62 patients undergoing NSM with single-stage reconstruction, the study evaluated clinical characteristics, surgical outcomes, long-term follow-up. Perioperative assessments indicated excellent flap viabilities. Pathology results revealed acceptable oncological safety. Adverse events included seroma(4.84%), hematoma(3.23%), wound infection(14.52%), and mastectomy flap necrocis(12.90%). Patients expressed a high satisfaction rate(80.64%) with excellent cosmetic outcomes, implant-related issues were minimal during follow-up. Overall, the study provided comprehensive insights into the efficacy and safety of the NSM-PC procedure.

Discussion: The evidence from these studies supports the consideration of single-stage NSM-reconstruction with prepectoral implant placement for patients with early-stage breast cancer who meet the criteria for nipple-sparing mastectomy.

Keywords: Prepectoral implant, immediate reconstruction, breast cancer, partial mesh covering, late absorbable mesh

[OP-010]
WHOLE BREAST RECONSTRUCTION FROM A REAL-WORLD CANCER SURGEON'S PERSPECTIVE: REVISITING THE PEDICLED TRAM FLAP

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Objective: Modified radical mastectomy (MRM) remains the most commonly performed surgery for breast cancer in India and immediate whole breast reconstruction(WBR) is not commonly offered. The challenges are too many patients per surgeon, long operative waitlists, lacking infrastructure, and often a dearth of plastic surgeons. Given the scarce availability of microvascular reconstruction, we initiated pedicled transverse rectus abdominis myocutaneous(TRAM) flaps to give patients more holistic treatment. The objective of this study was to assess the feasibility of performing a TRAM flap by surgical oncologists in a resource-constrained real-world setting.

Methods: This is a retrospective analysis of a prospectively maintained database from January 2017-April 2024. Inclusion criteria were MRM patients who gave informed consent for WBR and TRAM flap and who have completed all chemotherapy. Exclusion criteria were age>60 years, body mass index>30 kg/m2, diabetes mellitus, and prior abdominal surgery. The primary endpoint was the incidence of severe flap-related complications of the TRAM flap at the mastectomy site when done by a surgical oncologist. Secondary endpoints were flap-site morbidity (classified according to Andrades et al. where grades 4 to 6 were classified as 'severe') and donor-site morbidity, classified as wound dehiscence, infection, hematoma, seroma, and hernia. Frequencies and percentages and median with interquartile range were used, respectively, for categorical and continuous variables.

Results: There were 72 patients who underwent immediate WBR via TRAM flap after MRM. Severe flap complications were 2.8% (2/72), while flap-site and donor-site complications were, respectively, 20.8% (15/72) and 15% (11/72). Flap loss and incisional hernia were not seen. Median operative time and blood loss were, respectively, 180 minutes (interquartile range 165-210) and 150 millilitres (interquartile range 137.5-180).

Conclusion: Pedicled TRAM flap is feasible and safe when performed by surgical oncologists, immediately after mastectomy, in the developing world. Psychosocial acceptance remains challenging, warranting dedicated counselling and inter-patient communication.

Keywords: Whole Breast Reconstruction, TRAM flap, Mastectomy

[OP-011]
BIPEDICLE DEEP INFERIOR EPIGASTRIC ARTERY PERFORATOR FLAP FOR WHOLE BREAST RECONSTRUCTION: AN INSTITUTIONAL REVIEW

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Background: For some patients seeking autologous breast reconstruction, there may be insufficient abdominal skin and soft tissue to reconstruct an adequately sized breast. Perfusion from a single-pedicle deep inferior epigastric perforator artery flap has a high degree of variability across the midline, further limiting perfusion. Bipedicled DIEP flap is a reliable technique for reconstruction in these women, and this study examines our experience.

Methods: A retrospective analysis was conducted including patients who had unilateral breast reconstruction with bi-pedicled DIEP flaps over 3 years. Operative notes and postoperative course were reviewed.

Results: Thirty patients underwent immediate (n = 24) or delayed (n = 6) reconstruction, aged 54.1 ± 8.4 years. All patients had preoperative abdominal computerised tomography scans. Recipient vessels used for microvascular anastomosis, internal mammary antegrade and retrograde (n=22), turbocharging of flap and internal mammary vessels (n=5), internal mammary and thoracoacromial vessels (n=1), internal mammary and lateral thoracic vessels (n=1). There were no flap losses. Aesthetically satisfactory results were achieved in all patients.

Conclusion: Unilateral whole breast reconstruction with bipedicled DIEP flaps is safe and reliable. The additional skin and soft tissue available with bi-pedicled flaps allows for greater flexibility in matching the shape and projection of a woman's contralateral breast and has a better vascular perfusion profile.

Keywords: DIEP flap, Whole Breast Reconstruction, Bipedicle

[OP-012]
DIRECT-TO-IMPLANT RETROPECTORAL DUAL PLANE APPROACH WITH AUTOLOGOUS INFERIOR-BASED DERMAL FLAP: DOES SPY-ELITE LASER ANGIOGRAPHIC SYSTEM REDUCE COMPLICATION RATES?

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Purpose: The study investigates complications and long-term outcomes of retropectoral direct-to-implant (DTI) breast reconstruction with inferior dermal flap (IDF) using the SPY-Elite laser angiographic system.

Material and Method: This retrospective study, conducted from June 2017 to January 2023, included 52 patients (85 breasts) treated with a direct-to-implant retropectoral dual plane approach with IDF implant coverage. Informed consent was obtained from all participants. Inclusion criteria required patients to have medium to large breasts and second or third-degree ptosis per the Regnault ptosis scale. Intraoperatively, mastectomy flaps and IDF were assessed with the SPY-Elite system using near-infrared imaging. Patient demographics, characteristic data, and complications were recorded.

Results: A total of 52 patients, aged 27 to 63, underwent 85 mastectomies using the direct-to-implant retropectoral approach with IDF. The average patient age was 48, and the average BMI was 30.8 (range 28-43). The nipple-to-inframammary fold distance varied between 14 and 24 cm. Implants averaged 275 cc (range 250-650 cc) and were textured anatomic implants with moderate plus or high profile. The sternal notch to nipple distance ranged from 24 to 38 cm. Insufficient distal marginal perfusion was detected in five out of 85 IDFs (5.8%) using the SPY-Elite system, leading to debridement and successful reconstruction. No IDF-related necrosis or failed SPY ICG assessments were observed. The overall complication rate was 15.2%, with minor complications in 8.2% (7 out of 85) and major complications in 7% (6 out of 85). Subjects were monitored for an average of 14 months (range 12-24 months).

Conclusion: Inferior dermal flaps offer advantages such as natural autologous blood supply, realistic tissue thickness and texture, lower costs, and better tolerance to post-reconstruction radiation. The IDF technique, combined with SPY-Elite system assessment, provides reliable and efficient cosmetic results in a single operation, reducing the need for additional surgeries.

Keywords: Retropectoral Breast Reconstruction, Inferior Dermal Flap (IDF), SPY-Elite Laser Angiography, Complications, Long-term Outcomes

[OP-013]
APPLICATION OF A SINGLE-USE NEGATIVE PRESSURE WOUND THERAPY SYSTEM AND COMPARISON WITH THE USE OF STANDARD DRESSINGS AFTER TISSUE EXPANDER REPLACEMENT SURGERY WITH BREAST IMPLANTS: ASSESSMENT OF SURGICAL SITE COMPLICATIONS AND SCAR QUALITY

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Introduction: In breast reconstructive surgery, proper wound healing is a crucial aspect that, among other things, prevents damage to implants and the need for reoperation. Single-use negative pressure dressings are becoming an increasingly popular method of preventing later complications. This method can improve tissue perfusion, reduce swelling, and protect the wound against contamination.

Objective: The project aims to prospectively assess the quality of scars and complications of the surgical site after the use of a negative pressure wound therapy system compared to the use of standard dressings after tissue expander replacement surgery with breast implants.

Materials-Methods: The research group consists of patients who previously underwent mastectomy due to breast cancer and breast reconstruction using tissue expanders. In half of them, NPWT was applied to the sutured wound, and in the other half, a standard dressing was applied. Assessment of the quality of the scar and the change in its elasticity are measured objectively using a cutometer. The characteristics of the patients were considered.

Results: The study included 60 patients who underwent 82 exchanges of expanders with implants. In the case of bilateral exchanges, a vacuum dressing was applied to one breast and a standard dressing to the other. Statistically significant differences between the elasticity and quality of the scar were demonstrated. Worse wound healing occurred in 12 patients - 10 with a standard dressing, and 2 with NPWT. A significantly smaller amount of seroma accumulation was also observed in patients with a vacuum dressing compared to a standard dressing (average 60:100 ml).

Conclusions: Results indicate faster healing, better scar quality and skin elasticity in patients who used NPWT - evaluation up to 6 months after the procedure. The final results indicate the validity of using single-use NPWT in the prevention of postoperative complications in breast cancer.

Keywords: breast, NPWT, scar, wound healing

[OP-014]
EVALUATION OF BIOCOMPATIBILITY OF POLYCAPROLACTONE-BASED MATERIALS IN IMPLANT-BASED BREAST RECONSTRUCTIONS: A RAT MODEL STUDY

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Objective: Implant-based breast reconstruction is the most common method after mastectomy. Due to the high cost and risk of complications associated with acellular dermal matrix (ADM), synthetic meshes are often used as an alternative. This study aims to evaluate the biocompatibility of polycaprolactone (PCL) and PCL/gelatin materials for breast reconstruction through a rat model.

Materials-Methods: We conducted a study to examine the histopathological reactions to mini-implants placed under the skin. A total of 40 female Wistar albino rats were separated into four groups. In the control group, a surgical incision was made to create an implant pocket, and then the skin incision was closed without implant placement. The experimental groups received mini-implants that were either uncoated, coated with PCL, or coated with PCL/gelatin. After a month of evaluation, we assessed acute and chronic inflammatory responses, granulation tissue formation, foreign body reactions, and capsule characteristics.

Results: There was no significant difference in the distribution of acute inflammation scores between the groups ($p>0.05$). The group without mesh exhibited significantly higher chronic inflammation scores than the PCL and PCL/gelatin groups ($p<0.001$). Foreign body reactions peaked in the PCL/gelatin group, with significant distinctions across all comparisons. The PCL/gelatin group also presented the thickest cavity walls ($p<0.001$).

Conclusions: PCL demonstrated promising biocompatibility, showing minimal acute and chronic inflammatory reactions and a mild foreign body response, suggesting its safety for in vivo use. Conversely, the PCL/gelatin combination exhibited higher foreign body reaction and cavity wall thickness, warranting further investigation to optimize its structural properties for medical applications

Keywords: Breast reconstruction, implant, polycaprolactone, gelatin, biocompatibility

[OP-015]
LONG TERM RESULTS OF BREAST CANCER PATIENTS WITH BRCA1/2 MUTATIONS TREATED WITH RADIOTHERAPY

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Objective: To analyze the long term results of breast cancer (BC) patients with BRCA 1-2 mutations treated with radiotherapy (RT).

Materials-Methods: Patient selection for BRCA1-2 testing was done in accordance with NCCN guidelines, and the tests were performed using next-generation sequencing. Statistical analyses were performed with SPSS version 25.

Results: Among 57 patients with a median age of 45 (range: 24-71), 54.4% had BRCA 1, 45.6% had BRCA 2 mutation. Neoadjuvant chemotherapy (NACT) administered to 52.6% patients. Luminal B subtype was observed in 38.6%, and TNBC in 28.1%. While the vast majority (81.2%) of TNBC patients had BRCA 1 mutation, and 62% of the luminal type patients had BRCA 2 mutation (p:0.014).Only 2 patients experienced acute grade 3 radiodermatitis.

With a median of 73 months of follow-up (range:6-353 months) 1 patient had regional recurrence, 10 had distant metastases, 2 had second primary cancer, 2 had contralateral (CL) synchronous, and 8 had CL metachronous BC with a median time to develop is 67 months (range: 12-115).

At the time of the analyses 77.6% patients are alive without disease, 5.2% are alive with disease, 12.1% died due to disease and 3.4% died due to other causes. 5 y OS, DFS and DMFS is 89.4%, 80.4%, and 82.5% respectively. For OS, DFS and DMFS; age >= 60 years (p=0.00, p=0.002,p=0.001), cN stage (p=0.08, p=0.03, p=0.04), pN stage (p= 0.002, p=0.02, p=0.02) were significant prognostic factors. Among 30 BC patients treated with NACT pT stage was found as a prognostic factor for both OS (p=0.03) and DFS (p=0.004)

Conclusion: We did not observe a local recurrence or increased risk of RT-induced toxicity, however as reported in the literature CL BC risk is higher in BRCA mutation carriers than the sporadic BC patients which is 17% in our patient population.

Keywords: BRCA mutation, Contralateral breast cancer, Radiotherapy, Toxicity

[OP-016]
AXILLARY RADIOTHERAPY FOLLOWING METASTATIC SENTINEL LYMPH NODE BIOPSY FOR T1-2 BREAST CANCER PATIENTS: REAL-WORLD DATA

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Objective: Following publication of ACOSOG Z0011 and AMAROS trials, completion axillary dissection has been largely replaced by axillary radiotherapy (ART) We aim to analyse regional control and toxicity rates for T1-2 and with 1-2 SLNB metastases.

Materials-Methods: Seventy-one patients treated with radiotherapy (RT) from 2013 to 2022 were retrospectively reviewed. RT was delivered to chest wall /breast and level I-II-III and IV axillary LN regions and ±IMLNs. LN's contoured according to the RTOG guidelines. Statistical tests were performed by SPSS v 25.

Results: Median age of the patients 53 (range: 27-74) with 83.1% of them had breast conserving surgery. The median size of the tumor is 2 cm (range: 0.3-5 cm). The vast majority (73.2%) of the patients had IDC histopathology. More than half (60%) of the patients had Luminal B, and none of the patients had TNBC. Chemotherapy was administered to 67.4% and hormonotherapy to 94.4% of the patients. The median number of SLNB is 4 (range:1-8) and 85.9% of the patients had 1 LN met, 14.1% had 2 LN metastases. While 53.5% of the patients had micrometastases, 46.5% of them had macrometastases. While ECE was seen in 5.4% of the patients with micrometastases, it was 19% in patients with macrometastases (p=0.08).

During a median follow-up duration of 76 months (range:16-128) none of the patients had locoregional recurrence and distant metastases. During follow-up period 3 patients had shoulder pain, 1 had decreased range of motion of the shoulder, 2 patient had both, and 4 patients had lymphoedema. Among the patients with >3 SLNB dissected 12% of them had lymphoedema, none of the patients had lymphoedema if the SLNB is <= 3 LN (p=0.05).

Conclusion: ART provides excellent control rates and raised the question whether to be de- escalated in low risk patients.

Keywords: Breast cancer, axillary radiotherapy, sentinel node positivity

[OP-017]
RADIOSO MILAN TRIAL: CLINICAL AND ORGANIZATIONAL BENEFITS OF SCOUT RADAR-LOCALIZATION-SYSTEM FOR NON-PALPABLE LESIONS

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Nowadays, thanks to screening programs and new diagnostic techniques, up to 30-40% of breast cancer are diagnosed in form of non palpable lesions. A precise localization is essential, to obtain a better cosmetic result with less healthy tissue loss and to provide a negative surgical margin.

The Radioguided Occult Lesion Localization (ROLL) technique was developed at the European Institute of Oncology (IEO) in 1996 and has since become the mainstay of pre-operational lesion localization in our facility. Although ROLL remains the standard of care at IEO, in order to evaluate an innovative wire-free localization technique, we designed the RADIOSO Milan Trial (RADar Reflector LocalisatIOn-SCOUT for carcinOma mammae Milan Trial), a monocentric prospective observational study that aims to evaluate the impact from a clinical and organizational perspective of SCOUT® RADAR Localization (SRL by Merit Medical) for patients undergoing breast-conservingsurgery

STUDY DESIGN: The Trial plans to enroll 300 patients undergoing breast conserving surgery with non palpable lesions localized thanks to SCOUT® RADAR Localization The Aim of the study is to evaluate the impact from a clinical and organizational perspective of SCOUT® Radar Localization

Primary Endpoints: Success rate of positioning, locating and retrieving the SCOUT® Radar Reflector

Secondary Endpoints: Percentage of positive margins, percentage of re-intervention needed, Workflow comparison between ROLL and SCOUT

Keywords: Breast, Breast surgery, Oncology, Conserving Surgery, SCOUT

[OP-018]
COMPARISON OF THE EFFECTIVENESS OF THE MAGTRACE®-MAGNETIC MARKER WITH THE FLUORESCENCE VISUALIZATION TECHNIQUE IN THE DETECTION OF SENTINEL LYMPH NODES IN BREAST CANCER: OPTIMIZATION OF SURGICAL TREATMENT

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Introduction: Sentinel lymph node biopsy is the most frequently used procedure during the surgical treatment of breast cancer. There are many methods to detect nodes. The choice of tactics is based on an individual approach to the patient, on the experience and capabilities of the center performing the procedure.

Objective: The study aims to prospectively evaluate the effectiveness and compare the use of a magnetic marker and fluorescence in the detection of SLN in patients with breast cancer.

Materials-Methods: Each patient is given a magnetic marker the day before the procedure, and indocyanine green on the day of the procedure. Both markers are administered to the same place, in the periareolar area. Intraoperatively, both methods detect sentinel lymph nodes. The material is sent for histopathological examination in separate containers. The results are analyzed in terms of the number of lymph nodes detected in each technique and their involvement by cancer cells.

Results: The study is ongoing. Currently, 74 patients have been included in the study. A total of 152 sentinel nodes were examined. 93,4% were identified thanks to the use of ICG, and 84,8% thanks to the magnetic marker. The number of nodes found by both methods is 77%. A total of 26 positive SLNs were found in 18 patients. 92,3% was achieved with ICG (24/26) and 96,1% with Magtrace (25/26).

Conclusions: Preliminary results indicate the effectiveness of both methods in detecting sentinel lymph nodes. In the current research group, indocyanine green shows more accurate detection. In the detection of metastatic nodes, the results are comparable. In patients with high BMI, it is difficult to clearly identify sentinel nodes using ICG. The final results of the study are intended to compare and select a more accurate method for detecting sentinel nodes in breast cancer in each patient individually.

Keywords: breast, SLNB, ICG, Magtrace

[OP-019]
SINGLE CENTER EXPERIENCE OF THE HOLOGIC LOCALIZER SYSTEM FOR LOCALIZING IMPALPABLE BREAST LESIONS

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Purpose: Breast HOLOGIC seed guided wide local excision (BHSG-WLE), is a novel technique in breast-conserving surgery aimed at improving the accuracy of tumour localization and excision margins. This study aims to present our three-year experience using Hologic seed targeting for non-palpable breast lesions.

Methods: We conducted a retrospective analysis of 354 patients who underwent BHSG-WLE from January 2021 to December 2023. The primary outcome was the successful excision of the lesion and retrieval of the Hologic seed. Secondary outcomes included tumor pathological characteristics, time between insertion and retrieval, and breast margin re-excision rate.

Results: All patients were female with a median age of 61years (range 27-87). The median lesion size was 13 mm (range 1.5-70mm). There were 310 cases (87.8%) of invasive cancer, 43 cases (12.18%) of DCIS alone, one was benign histology.73 patients (20.6%) who had neo-adjuvant chemotherapy, of whom 56 patients (76.7%) had a complete pathological response. The primary lesion was excised and the Hologic seed was retrieved in 100% of cases. Of the 354 patients: 323 patients 91.25% had the seed introduced using ultrasound (USS) guidance and 31 patients 8.75% stereotactically.

98.5%of seeds were successfully placed near the tumour on imaging within 5mm. 6 patients had difficult insertion/migration.100% of seeds were inserted more than one day before surgery the median was 98 days (2-290 days).

Forty-four seeds (12%) fell out during the surgery/manipulation but did not affect the margins status and lesions were excised successfully. Twenty-four out of 354 patients (6.7%) had re-excision for positive margin.

Post insertion questionnaire showed high satisfaction.

Conclusion: The Hologic seed accurately localises impalpable breast lesions. It allows for flexible scheduling of image-guided insertions, improving operating room efficiency, better cosmesis and has lower margin re-excision rate.

Keywords: Breast-conserving surgery, Localization, Non-palpable, Seed, Hologic

[OP-021]
EFFICACY OF CLIP PLACEMENT TO THE METASTATIC LYMPH NODE BEFORE NEOADJUVANT CHEMOTHERAPY IN BREAST CANCER: DO WE STILL BELIEVE THE PROFITABILITY?

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Objective: Identification of axillary sentinel lymph nodes (SLN) can be challenging during surgery after NACT. Studies show that marking the lymph node with a clip before NACT increases the identification rate and also reduces the false negativity rate. In this study, we investigated the identification rate and pathological assesment of clip-marked lymph nodes of our patients.

Materials-Methods: Metastatic axillary lymph nodes of 93 patients (one bilateral-94 lymph nodes) were clipped before before NACT. SLNB with dual method (blue dye+lymphoscintigraphy) was performed for ones who showed complete response. Excised lymph nodes were sent for specimen graphy to demonstrate the clipped node removal. Level 1-2 axillary dissection(AD) was performed for the patients with no response.

Results: Mean age of 93 women was 50(range 26-79). Biopsy performed to the suspicious lymph nodes in 67 patients showed metastasis in 57, were negative in seven and insufficient in three patients. AD was performed in 13 patients who did not respond NACT. Targeted axillary dissection(TAD) involving dual method and clipped node removal was performed in 81 patients showing good response. In 76 patients, 39 had the clip in SLNs that were negative, and 36 in SLNs that were positive (75/76, 98.7% in the SLN). In only one patient, clip was in the nonsentinel node which was positive (1/76, 1.3%). No extra effort was made to search for the clips, which were not found during SLNB in four patients (4/81, 4.9%) and in one patient, the clip was in the fatty tissue, not in the SNs (1/81, 1.2%).

Conclusions: Clipped node was one of the sentinels in 98.7% of the patients. We think that clipping will not make an extra contribution to the dual method unless there is a chance to limit the axillary surgery by only marking and removing the clipped lymph node (radioactive seed, etc.).

Keywords: breast cancer, neoadjuvant chemotherapy, clip, sentinel lymph node

[OP-022]
RDI INDEX AS A NOVEL PREDICTOR OF NON-SENTINEL NODE POSITIVITY IN ACOSOG Z0011 ELIGIBLE BREAST CANCER PATIENTS: DEVELOPMENT OF A PREDICTION MODEL

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Objective: Accurate prediction of non-sentinel lymph node (nSLN) involvement is crucial for axillary de-escalation in early breast cancer. Existing international nomograms for predicting nSLN status have not been validated for the ACOSOG Z0011 eligible Indian population. We hypothesized that the microanatomic characteristics of metastatic sentinel nodes could predict nSLN involvement and form a novel clinicopathologic prediction model for Indian patients.

Materials and Methods: We conducted a retrospective chart review of 100 patients with positive SLN biopsy who met ACOSOG Z0011 trial criteria and underwent completion axillary dissection at MVR Cancer Centre (February 2021 to February 2023). Histopathology slides were reviewed to determine the microanatomic location of metastatic foci in the SLN, the maximum depth of invasion, and the ratio of depth of invasion to node diameter (Relative Depth of Invasion - RDI index). Statistical analyses and logistic regression were performed using IBM SPSS version 23. A predictive nomogram for nSLN status was generated using the "simpleNomo" Python toolbox.

Results: Sentinel node positivity was 27.2% (100/368). Most patients were postmenopausal (62%) with a median age of 54 years. The majority (84%) had unifocal cancers with a median tumor size of 2.6 cm, and 91% were grade 2/3. Additionally, 82% were ER-positive, and 10% were HER2-positive. Among SLN-positive patients, 38% had positive nSLN. ROC analysis identified an RDI cut-off value of 0.48 (Sensitivity=100%; Specificity=82.3%; AUC=0.904) to discriminate between positive and negative nSLN patients. Logistic regression indicated that tumor size, perineural invasion, extranodal extension, and RDI index were independently associated with nSLN metastases. The prediction model (Cox-Snell R^2=0.62) was used to develop a nomogram.

Conclusion: This first report on the "RDI index" as a predictor of nSLN status in breast cancer patients with positive SLNs proposes a nomogram based on clinicopathologic features and the RDI index. External Validation in a larger multicenter dataset is proposed.

Keywords: Non-sentinel lymph node (nSLN) status, Relative Depth of Invasion (RDI) index, ACOSOG Z0011, Early Breast cancer, Clinicopathologic prediction model

[OP-023]

A MACHINE LEARNING–DERIVED CLINICAL DECISION RULE FOR THE ASSESSMENT OF AXILLARY LYMPH NODE STATUS IN BREAST CANCER: THE INFLUENCE OF PRIMARY TUMOR BURDEN AND US SHEAR-WAVE ELASTOGRAPHY

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Objective: To establish a predictive model for the assessment of axillary lymph nodes (ALN) status in breast cancer (BC) considering histological BC features as well as US appearance of both primary BC and ALN. In particular, the influence of BC tumor burden (TB) and its stiffness as measured on US shear-wave elastography (SWE) was assessed.

Materials-Methods: Patients with histologically proven BC lesions and appropriate standard of reference of ALN status, who underwent a preoperative US examination including SWE were retrospectively included.

BC histological features (tumor type, grade, ER, PgR, Ki67 and Her2 expression), TB intended as BC US maximum diameter in unifocal and the sum of all maximum diameters in multifocal/centric disease, BC stiffness calculated on US-SWE and ALN US features, such as cortical thickness (presence/absence of cortical thickening according to 3 mm cut-off, cortical thickness measurement) and morphology (oval, irregular, round appearance and presence/absence of fatty hilum) were acquired. Univariate and ROC curve analyses were first performed, and a supervised naive-bayes machine learning model was then used for the classification task, splitting the population into 70% training and 30% test sets.

Results: The final study population comprised 239 patients (4 M/ 235 F, mean age:62.8 yrs). Among the included parameters, BC-TB, Ki67 expression, BC SWE stiffness, LN morphology and cortical thickness measurement resulted statistically significant at univariate analysis ($P<0.001$) with AUC of 0.677, 0.688, 0.611, 0.669 and 0.779, respectively. These were also selected and used by Naive Bayes classifier which obtained an accuracy of 74.7% in the training and 74% in the test set.

Conclusion: The combination of BC histological features and US appearance of primary BC lesions and ALN can be effective in non-invasively assessing ALN status in BC. Particularly, the role of BC-TB and stiffness measured on US-SWE seems promising and deserves further investigations.

Keywords: Breast cancer, Artificial intelligence, Ultrasound

[OP-024]
NODE MARKING TECHNIQUES AND TARGETED AXILLARY DISSECTION IN CN1 PATIENTS UNDERGOING NEOADJUVANT CHEMOTHERAPY: ANALYSIS OF INITIAL 546 PARTICIPANTS IN ATNEC TRIAL (NCT04109079)

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Background: In ATNEC breast cancer trial (NCT04109079), cT1-3N1M0 patients receive neoadjuvant chemotherapy (NACT) followed by sentinel node biopsy (SNB) or targeted axillary dissection (TAD). If the sentinel nodes (SNs) convert to benign (ypN0), patients are randomised to receive Axillary Treatment vs. no Axillary Treatment. Standardized node marking procedures are promoted in this study.

Aims: To evaluate node marking techniques, rates of marked node identification, and concordance of the marked node with SN in the initial participants.

Methods: Data from 546 patients enrolled up to 08 April 2024 across 75 UK hospitals were analysed.

Results: The median age was 54 years (range 28-81), with a median of 4 nodes [interquartile range, 3-5] removed during SNB/TAD. Among 546 patients with node marking data, 71% (390) had the involved node marked. SLNB was performed using a combination of radioisotope and blue dye in 56%, blue dye only in 13%, radioisotope only in 11%, and Magtrace only in 10%. The marked node was successfully removed in 91% (354/390) of patients, with the marked node being the SN in 80% (284/354) of cases. In patients with complete pathological nodal response, the marked node did not show signs of downstaging (e.g., fibrosis) in 15% (54). Common techniques used for node marking included clip/coil alone before NACT (28%), clip/coil before NACT with Magseed after NACT (13%), Magseed alone before NACT (17%), and black dye alone before NACT (14%). In 7 of 81 (8.6%) patients with residual nodal cancer on histology, the marked node was false negative.

Conclusion: Notably, 71% of patients underwent node marking, with an intra-operative identification rate of 91%, demonstrating the successful implementation of node marking in the UK through the ATNEC trial. A variety of node marking techniques yielded acceptable results. Removing only the marked node results in an 8.6% false-negative rate.

Keywords: Neoadjuvant trial, node marking, sentinel node, axillary dissection, Magseed

[OP-025]
COMBINED ANALYSIS OF THE NEOSENTITURK-TRIALS MF18-02 AND MF18-03 COHORTS OF CLINICALLY NODE-POSITIVE PATIENTS UNDERGOING SENTINEL LYMPH NODE BIOPSY AFTER NEOADJUVANT CHEMOTHERAPY

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Background: This study investigated the outcome in cN+ patients with sentinel lymph node study (SLNB) after NAC. Material-Methods: A combined analysis of the retrospective multi-center MF18-02 and the prospective multi-center cohort registry trial "MF18-03/BHWG" (NCT04250129) was performed including patients with cT1-4N1-3M0 with SLNB+/-axillary lymph node dissection (ALND). All patients received radiotherapy. The axillary (AR), locoregional (LRR) and systemic recurrence (SR)rates were analyzed.

Results: A total of cN+ 2745 patients, who became cyN0 and underwent SLNB after NAC, were analyzed. The majority had cT1-2 (n=2175, 79.2%) and N1 (n=2214, 80.7%). SLNB was performed with blue dye only in 1814 patients (66.1%) and dual tracer in 806 patients (29.4%), and radioisotope injection alone in 125 patients (n=4.6%). Overall, 715 cases (26%) had targeted axillary dissection (TAD) in addition to SLNB. Overall, 965 (35.2%) had ALND following SLNB or TAD (ypN+, n=803, 83.2%), and 1780 (64.8%) were treated with SLNB or TAD (ypN0, n=1265, 71.1%). After a median follow-up time of 33 months (range, 18–183), the LRR, AR, and SR rates were 1.7% (n=48), 0.3% (n=9), and 6.9% (n=190), respectively. No significant difference in LRR or AR rates was observed between patients with or without ALND, and with or without axillary pathologic complete response (pCR). The axillary, locoregional and systemic recurrences were less likely to be in patients with a breast pCR or breast&axillary pCR. Patients with residual tumor in axilla and/or breast and with ALND were more likely to have systemic metastases.

Conclusion: The present large registry data suggest that axillary and locoregional recurrences are rarely seen in cN-positive patients regardless of the extent of axillary surgery, or nodal pathology, as long as adjuvant regional radiation is provided. A pathologic complete response is associated with de-escalation in axillary surgery and excellent outcome with local and systemic control.

Keywords: sentinel node biopsy, axillary dissection, neoadjuvant chemotherapy, axillary recurrence, locoregional recurrence

[OP-025]

Table 1						
Variables (N=2745)	**AR**	***P*-value**	**L-RR**	***P*-value**	**SR**	***P*-value**
Axillary surgery		0.728		0.128		**0.0001**
ALND (n=965)	4 (0.4%)		22 (2.3%)		90 (9.3%)	
SLNB/TAD (n=1780)	5 (0.3%)		26 (1.5%)		100 (5.6%)	
pCR (axilla)		0.745		0.467		0.002
ypN(+) (n=1318)	5 (0.38%)		26 (2.0%)		112 (8.5%)	
ypN0 (n=1423)	4 (0.28%)		22 (1.5%)		78 (5.5%)	
pCR (breast)		0.033		0.019		0.001
Non-pCR (n=1595)	8 (0.5%)		33 (2.1%)		125 (7.8%)	
pCR (n=849)	0 (0%)		7 (8.2%)		36 (4.2%)	
pCR (axilla & breast)		0.115		0.032		<0.0001
Non-pCR (n=1760)	8 (4.6%)		35 (2.0%)		136 (7.7%)	
pCR (n=691)	0 (0%)		5 (0.7%)		25 (3.6%)	
Fisher's Exact test was used in statistical analysis.						

[OP-026]
IMPLANT RECONSTRUCTION: FINDINGS FROM THE AUSTRALIAN BREAST DEVICE REGISTRY

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Objective: This abstract aims to present emerging trends in implant reconstruction using data from the Australian Breast Device Registry (ABDR).

Materials & Methods: The ABDR is a Clinical Quality Registry that monitors the long-term safety and performance of breast devices, to identify and report on possible trends and complications and the quality of surgery involving breast implants, breast tissue expanders and acellular dermal matrix and other meshes associated with breast devices. The ABDR captures data on patients undergoing breast reconstruction following mastectomy for breast cancer and for risk-reduction; as well as cosmetic procedures.

Data analysis includes time-to-revision and survival analysis methods.

Results: In 2022, the ABDR reported 17,820 reconstructive patients undergoing 25,764 procedures with 38,190 devices. In 2022, 3,103 procedures were recorded, 40.6% bilateral post-cancer and 38.0% unilateral post-cancer. Trends over seven years show an increase in direct-to-implant reconstructions and a shift to smooth implants over textured devices. All-cause revision rates for reconstructive procedures post-cancer were 20% at 7 years. Direct-to-implant procedures using matrix/mesh had higher all-cause cumulative revision incidences at 7 years (22.5% vs 20.1%) and complication incidences (13.1% vs 9.4%) when compared to procedures without matrix/mesh.

In 2022, five new cases of BIA-ALCL were reported, totaling 64 cases in the registry.

Conclusion: The ABDR's 2022 Annual Report provides critical insights into implant reconstruction trends. Shifts towards direct-to-implant procedures and smooth implants reflect evolving practices and patient preferences within Australia's regulatory framework. These findings underscore the ABDR's role in enhancing safety, guiding clinical decisions, and improving outcomes in breast reconstruction surgery.

Keywords: breast reconstruction, breast device registry, breast implants, surgical outcomes

[OP-027]
TUMOR MICROENVIRONMENT MODULATION BY TUMOR-ASSOCIATED MACROPHAGES: IMPLICATIONS FOR NEOADJUVANT CHEMOTHERAPY RESPONSE IN BREAST CANCER

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Background: Tumor-associated macrophages (TAMs) constitute an important part of the tumor microenvironment of breast cancer (BC), and they play an essential role in modulating tumor growth, invasion, and metastasis. However, the role of TAMs in neoadjuvant chemotherapy (NAC) has not been fully elucidated in BC patients. Therefore, the aim of this study was to assess the function of TAM subtypes and investigate their role in the response to NAC in BC.

Methods: Expression of TAMs was examined immunohistochemically, pre- and post- NAC in a cohort of 138 BC patients. All the patients received 4 to 8 cycles of NAC and the treatment consisted of anthracycline- and taxane-based regimens. Immunohistochemical staining with monoclonal antibodies for CD68 and CD163 were performed. All staining procedures were done according to validated protocols and scoring was done by a pathologist specialized in BC. Positivity was defined as staining > 1% in stroma and tumor cell nests. Response to NAC was evaluated according to Residual Cancer Burden (RCB) index.

Results: The median age was 53.7 years (27–82) years. Diameter of tumor size decreased with a mean of 17.56 mm (-76mm- 70mm) ($p< 0.001$) during NAC. CD68 expression decreased in the stroma and tumor cell nests after NAC ($p<0.001$). On the other hand, CD163 expression in the stroma significantly decreased ($p<0.001$) and a decrease in tumor size was found to correlate with the change in CD163 expression in the stroma. In addition, there were statistically significant differences between the changes in the presence of CD163 macrophages in the stroma and the RCB classes.

Conclusion: This study highlights the significant role of TAMs, particularly CD163+ TAMs, in chemotherapy resistance and response mechanisms in BC. Further research into TAM subtypes and their impact on treatment outcomes is warranted to improve therapeutic strategies and patient outcomes in BC.

Keywords: Tumor-associated macrophages, CD68, CD163, Breast cancer, Neoadjuvant chemotherapy

[OP-028]
ELACESTRANT IN VARIOUS COMBINATIONS IN PATIENTS WITH ESTROGEN RECEPTOR-POSITIVE, HER2-NEGATIVE LOCALLY ADVANCED OR METASTATIC BREAST CANCER: PRELIMINARY DATA FROM ELEVATE, A PHASE 1B/2, OPEN-LABEL, UMBRELLA STUDY

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Objectives: Endocrine therapy (ET) + CDK4/6i is the mainstay in first-line ER+/HER2- mBC; however, resistance to ET arises. Intrinsic resistance mechanisms include alterations in the PI3K/AKT/mTOR or cell-cycle pathways. Acquired resistance mechanisms include ESR1-mut during ET for mBC. In EMERALD, single-agent elacestrant significantly improved PFS vs SOC ET and was associated with manageable safety in patients with ER+/HER2-, ESR1-mut mBC previously treated with ET+CDK4/6i, leading to the first oral SERD approved. To address resistance mechanisms and enable all-oral combinations, ELEVATE (NCT05563220) is evaluating elacestrant in combination with everolimus, alpelisib, capivasertib, ribociclib, palbociclib, or abemaciclib.

Methods: Eligible patients have ER+/HER2- mBC. Phase 1b objective is to identify each combination's recommended phase 2 dose (RP2D). The ELECTRA study (NCT05386108) evaluated the RP2D of elacestrant + abemaciclib. This analysis reports updated data from the phase 1b portion for combinations completing Cohorts 1-3 (everolimus and ribociclib).

Results: 23 pts have been enrolled in the elacestrant (258-345 mg) + everolimus (5-10 mg) cohorts. The most common treatment-emergent AEs >=30% (TEAEs) were nausea (All Grade [Gr], n=13, 57%; Gr >=3, n=1, 4%), stomatitis (All Gr, n=12, 52%; Gr >=3, n=2, 9%), diarrhea (All Gr, n=10, 43%; Gr >=3, n=2, 9%) and fatigue (All Gr, n=10, 43%; Gr >=3, 9%, n=2). Elacestrant 345 mg + everolimus 7.5 mg QD was identified as the RP2D. 18 pts have been enrolled in the elacestrant (86-258 mg) + ribociclib (400 mg) cohorts. The most common TEAE >=30% was neutropenia (All Gr, n=7, 39%; Gr >=3, n=5, 27%). Phase 1b with the other combinations are ongoing. Elacestrant 345 mg QD + abemaciclib 150 mg BID was selected as the RP2D from ELECTRA.

Conclusion: Elacestrant has the potential to become the ET backbone with targeted therapies, enabling all-oral combinations. Phase 2 for elacestrant + abemaciclib and elacestrant + everolimus are enrolling.

Keywords: elacestrant, metastatic breast cancer, endocrine resistance

[OP-029]
EILEEN STUDY: A RETROSPECTIVE REAL-WORLD ANALYSIS OF RESPONSE RATES WITH RIBOCICLIB AND ENDOCRINE THERAPY IN POSTMENOPAUSAL HORMONE RECEPTOR-POSITIVE, HUMAN EPIDERMAL GROWTH FACTOR RECEPTOR 2-NEGATIVE METASTATIC BREAST CANCER

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Background: We aim to demonstrate the initial response rates of ribociclib (RIB) at first assessment, its real-world effectiveness and safety, as well as to determine chemotherapy preference rates and underlying dynamics in HR+ metastatic breast cancer (MBC).

Materials & Methods: RIB in combination with endocrine therapy i.e., letrozole/fulvestrant (LET/FUL) is approved locally for postmenopausal HR+ HER2- MBC. RIB+FUL is used for early recurrence & in 2nd line setting while RIB+LET is used for 1st line setting (de novo metastatic disease & late reccurrence) as per the local label.

194 MBC patients from 13 centers whose treatment was initiated between 1 June 2020- 31 Jan 2022 were included in this retrospective study. Group 1 (n=180) patients received RIB in combination with LET/FUL (RIB+LET n= 104, RIB+FUL n= 76) and Group 2 (n=14) received chemotherapy.

Results: The median ages for Group 1&2 were 54.0 years (29-78) and 58.5 years (36-72). Visceral disease was present in 44% and 36% of patients; de novo metastatic disease was 52% and 64% in Groups 1&2 respectively.

In Group 1, the complete response, partial response, stabil disease rates were 9%, 40% and 37% respectively in the first visit assessment performed within 6 months. The objective response rate was 60% for RIB+LET and 34% for RIB+FUL. Median progresion free survival was 30.6 months (95%CI:NA) with RIB+LET and 14.1 months (95%CI:12.0-16.2) with RIB+FUL.

RIB was generally well tolerated. There was 34 patients with at least 1 adverse event (AE) (18.9%), the most common AE was neutropenia (61.5%) in patients with AEs.

Conclusion: Response rates and effectiveness of this real-life setting was consistent with the MONALEESA-2&3 clinical trials. Chemotherapy use dynamics overlapping HR+ postmenopausal MBC patient population could not be concluded due to the small patient population, which might show us the chemotherapy preference trend was declining after CDK4/6 inhibitor approval.

Keywords: metastatic breast cancer, hormone receptor, ribociclib, response rate, postmenopausal

[OP-030]
EFFECT OF REMOTE FOLLOW-UP AFTER BREAST CANCER SURGERY WITH A MOBILE APPLICATION ON QUALITY OF LIFE AND BREAST SURGERY EARLY COMPLICATIONS

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Introduction: Breast cancer remains a leading cause of cancer-related deaths among women worldwide. Although advancements in early diagnosis and treatment have reduced mortality rates, these treatments can significantly impact patients' quality of life (QOL). Surgical and medical treatments often lead to physical and psychosocial side effects, affecting physical functions and mental health. Patients are at high risk for anxiety and depression. The use of digital health technologies, like mobile health applications, to support self-management, reduce symptoms, and improve quality of life for cancer patients is increasing.

Objective: This study aims to enhance the self-management of breast cancer surgery patients using a mobile health application developed with Kocaeli University Faculty of Computer Engineering. The goal is to improve patients' quality of life by monitoring them during the 4-week postoperative period and allowing early intervention for any complications.

Methods: In this prospective randomized controlled trial, 102 patients were randomly divided into two groups of 51 each: one group was monitored in person, while the other was monitored remotely via the mobile application. The remote group could communicate with their physician through the application and recorded their symptoms through a 7-question survey based on the EORTC QLQ-C30 symptom scales. The other group monitored in person had weekly check-ups. At the end of the 4th week, quality of life was compared using the EORTC QLQ-C30, covering general health, functional scales (physical, role, emotional, cognitive, social), symptom scales (fatigue, nausea, pain, dyspnea, insomnia, appetite loss, constipation, diarrhea, financial difficulties) and also the breast surgery early complications. The remote group showed significantly better scores in role functioning, emotional functioning, and cognitive functioning. Also there was not any significant difference between both groups in follow-up of breast cancer early complications.

Conclusions: This study demonstrates that remote monitoring via a mobile application yields better outcomes in role, emotional, and cognitive functions. These findings support the effectiveness of mobile applications in improving the quality of life for breast cancer patients. But there was not any extra advantages on breast cancer early complications follow-up.

Keywords: breast cancer, cancer treatment, quality of life, mobile health, mobile application

[OP-031]
THE EFFECTS OF PATIENT EDUCATION ON LIMITATIONS OF THE AFFECTED EXTREMITY AND EXERCISE COMPLIANCE IN PATIENTS UNDERGOING SURGERY FOR BREAST CANCER

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Objective: One major issue for breast cancer surgery patients is the lack of detailed information about shoulder and arm movement restrictions post-discharge and recommended early-stage exercises. This study aims to assess the effectiveness of an individualized education program by trained healthcare professionals on extremity limitations and exercise compliance in patients treated with sentinel lymph node biopsy (SLNB) or axillary dissection (AD) for breast cancer.

Materials-Methods: Eighty breast cancer surgery patients hospitalized between June and December 2018 were included in the study. Of these, 20 patients (25%) underwent AD, and 60 patients (75%) underwent the SLNB procedure. Patients were collectively examined and subsequently divided into two groups. All patients received a multidisciplinary education program by a specialist nurse, covering extremity protection measures, suitable home exercise programs, and daily physical activities. Two weeks post-education, patients completed the "Breast Cancer-Related Extremity Limitations and Exercise Compliance Awareness Questionnaire" (BCAQ), comprising 30 literature-based questions.

Results: Two weeks after the education program, 75% of all patients (60 patients) felt "adequately equipped" regarding extremity protection. This rate was 50% (10 patients) in the AD group and 83.33% (50 patients) in the SLNB group. The average BCAQ score was 23.4/30. Seventy percent of the patients (56 patients) reported completing all prescribed exercises. This rate was 30% (6 patients) in the AD group and 83.33% (50 patients) in the SLNB group. None of the patients reported difficulty with the exercises. Only 3 patients (3.7%) experienced numbness and pain in the extremity during daily physical activities.

Discussion: Professional education post-breast cancer surgery can enhance patient compliance with physical activities, particularly among those initially unaware of such guidelines. However, this effect is limited and short-term. In AD patients, societal fears about extremity use reduce exercise compliance and awareness levels. Further insights could be gained through larger, randomized controlled studies.

Keywords: Breast cancer, Professional nursing education, Extremity limitations

[OP-032]
ASSESSMENT OF SHOULDER DYSFUNCTION AFTER AXILLARY DISSECTION: A PROSPECTIVE OBSERVATIONAL STUDY

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Objective: Shoulder dysfunction is common following axillary dissection(AD) in breast cancer patients due to nerve damage. However to date there are no studies that have prospectively analyzed the incidence of motor neuropraxia. We intended to objectively determine the incidence of neuropraxia after AD and monitor its recovery by evaluating Electromyography(EMG) potentials of pectoralis major(PM), latissimus dorsi(LD), and serratus anterior(SA) muscles which are innervated, respectively, by the medial and lateral pectoral nerves(PN), thoraco-dorsal nerve(TDN), and long thoracic nerve(LTN).

Methods: This is a prospective observational study(2020-2023) of patients who underwent AD. Shoulder function was assessed before surgery, and after surgery at three and six months, respectively, using needle EMG of the PM, LD, and SA muscles. Muscle Spontaneous Activity(MSA) and Motor Unit Action Potential(MUAP) were measured for each muscle during shoulder movement. Muscle weakness was graded as mild, moderate or severe according to motor unit loss at respective recruitment frequencies. Shoulder dysfunction was clinically evaluated using range of motion (with goniometer) and Simple Shoulder Test. Frequencies and percentages and median with interquartile range were used, respectively, for categorical and continuous variables. A p-value<0.05 was considered significant.

Results: Of 101 patients studied, neuropraxia affected 17.8% and 4.95% of patients, respectively, at 3 and 6 months. Most common neuropraxia at 3 months was to TDN along with LTN(7.9%) followed by TDN alone (4.9%), TDN and PN (2.9%), and LTN (1.9%). At 6 months, neuropraxia was noted in TDN alone (3.9%). Level III ALND was significantly associated with a decrease in forward flexion (p=0.03) at 3 months.

Conclusion: Following axillary dissection, neuropraxia is seen most commonly in TDN followed by LTN. It is most prominent at 3 months, however no debilitating shoulder dysfunction was noted in any of the patients probably due to the composite action of all the muscles contributing to shoulder movement.

Keywords: Axillary Dissection, EMG, Shoulder dysfunction

[OP-033]
THE EFFECT OF MANUAL LYMPH DRAINAGE IN THE TREATMENT OF BREAST EDEMA THAT MAY OCCUR IN PATIENTS UNDERGOING BREAST-CONSERVING SURGERY AND ADJUVANT RADIOTHERAPY: RANDOMIZED CONTROLLED STUDY

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Background: As life expectancy increases after breast cancer, chronic side effects of treatment negatively affect the quality of life.Some patients may development breast edema in breast that have undergone surgery or radiotherapy. Breast edema has been much less researched in the literature compared to arm lymphedema. Fibrosis, edema and pain may occur in the breast during and after cancer treatment. For these reasons, it is necessary to prevent the development of breast edema and to treat it if breast edema has developed.

Methods: We conducted a prospective study including 25 patients who underwent breast-conserving surgery followed by radiotherapy between May 2023 and May 2024. 13 patients were included in the control group, which received education, compression and exercise therapy;12 patients were included in the treatment group. We applied manual lymph drainage (MLD) to the patients in the treatment group, unlike the control group. We performed 20 sessions of MLD for the patients in the treatment group. Patients were evaluated in terms of breast edema parameters and breast edema questionnaire at the 10th session of radiotherapy, at the last session of radiotherapy and 3 months after radiotherapy.

Results: Before treatment, breast edema parameters and breast edema questionnaire mean were statistically similar between the groups ($p>0.05$).In the measurements taken 3 months after radiotherapy, the mean breast edema parameter taken from the control group was statistically higher than the treatment group.In terms of breast edema questionnaire, the change in measurement times in the treatment group was statistically higher than the control group.

Conclusions: • Manual lymph drainage is effective in the treatment of breast edema in patients who have undergone breast-conserving surgery and received adjuvant radiotherapy.• Therapeutic exercise and compression alone are not sufficient in the treatment of breast edema.• Breast edema that develops due to breast cancer treatment should not be ignored.

Keywords: breast cancer, breast conserving surgery, breast edema, manuel lymph drainage, radiotherapy

[OP-034]
ACCESS TO HEALTHCARE SERVICES FOR INDIVIDUALS LIVING WITH TRIPLE-NEGATIVE BREAST CANCER: PERSPECTIVES OF PHYSICIANS, NURSES, AND PATIENTS

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Objective: This study aims to identify the experiences and disease journeys of patients living with Triple-Negative Breast Cancer (TNBC) and healthcare professionals (physicians and nurses) regarding the diagnostic and treatment processes

Method: A phenomenological research approach, a qualitative research model, was used. The participants consisted of 22 people, 10 women diagnosed with Triple-Negative breast cancer and 12 health professionals (7 physicians, 5 nurses). All interviews were audio-recorded and transcribed into written text. These texts and interviewer notes were analyzed using thematic analysis.

Results: The analysis of the data revealed four main themes. The first theme, Diagnosis, highlighted that patients often consulted general surgeons due to palpable masses, experienced delays in diagnosis due to waiting for test results, the lack of consideration of cancer possibility in younger patients by physicians, and delays in seeking care due to misinformation. These delays, exacerbated by the aggressive nature of this cancer type, negatively impacted patients. The second theme, Treatment Process, identified differences in access to treatment between private and public healthcare institutions, the financial burden of treatments on patients, and the chemotherapy process as the most challenging period for patients. Issues such as hair, eyebrow, and eyelash loss had a negative effect on patients, and difficulties in accessing innovative medications were also reported. The third theme, Information, revealed that while physicians and nurses believed patients were sufficiently informed, many patients felt inadequately informed. Those who were negatively affected often sought information online. The fourth theme, Fertility or Fetus Preservation, showed that physicians attempted to be sensitive in this regard, but patients sometimes faced dilemmas between receiving treatment and preserving fertility or the fetus, leading to treatment delays.

Conclusion: It can be stated that women living with Triple-Negative Breast Cancer (TNBC) experience a similar patient journey to those living with other types of breast cancer in terms of diagnosis access, utilization of treatment services, and information provision. In this context, difficulties in accessing diagnosis, treatments, and innovative therapies, challenges during the chemotherapy process, and inequalities between public and private healthcare services appear to be common issues in this journey for everyone. However, our study has shown that the presence of TNBC in younger women makes the effects of chemotherapy, such as hair loss, more pronounced, contributes to delays in diagnosis, and leads to issues related to fertility preservation.

Keywords: Breast cancer, triple-negative cancer, quality of life

[OP-035]
PROSPECTIVE EVALUATION OF THE RELATIONSHIP BETWEEN INTESTINAL MICROBIOTA IN CASES DIAGNOSED WITH BREAST CANCER

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It is increasingly recognized that the gut microbiota plays important roles in human health. Most of these microorganisms are found in the gastrointestinal tract. Microorganisms reflect both genetic and lifestyle variables of the host. This microbiota is in dynamic balance with the host. Microbial spoilage (dysbiosis) can cause health problems. Various bacterial genes may be found that can produce enzymes that metabolize estrogen. Serum has modulatory components in the intestinal microbiota. The interaction between the microbiota and some hormones may cause the emergence of some of them.

Finally, it suggests that the microbiota of women with breast cancer is different from that of healthy women, and that some diseases may change with the development of cancer and different responses to treatment. We are investigating this growth and entropy between microbiota and breast cancers. We evaluate the microbiota relationship between breast cancer tissues, normal breast tissues and stool samples of patients who were diagnosed with breast cancer and underwent surgery.

Stool samples, perioperative tumor breast tissue, and normal breast tissue were collected from 22 patients diagnosed with breast cancer who underwent breast-conserving surgery. These samples were stored at -80°C. Subsequently,16S rRNA analysis was performed. The bacterial families, genera, and species present in all tissue samples were compared to evaluate the differences between them.

267 genus,164 families and 476 species were isolated separately from these samples of all patients. Their numbers have been determined. Of these isolated bacteria, especially 22 genus, 22 families, 26 species were found to be present in statistically significantly different numbers in tumor breast tissue and normal breast tissue.

Even though our study was conducted on a limited number of patients,significant differences were detected. This has shown that similar studies to be conducted in larger patient groups will provide us with much more detailed information on this subject.

Keywords: breast tumor, microbiota, intestinal microbiota

[OP-036]
NACSOME MAPPING WITH MRI MAMMOGRAM: PAVING THE WAY FOR SAFER THERAPEUTIC MAMMAPLASTY AND NIPPLE-SPARING MASTECTOMY

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Objective: Preoperative breast MRIs can aid in oncoplastic surgery and nipple sparing mastectomy by identifying the dominant vascular supply to the nipple-areola complex (NACsomes)in vivo.The objective of this study was to determine and categorize the blood circulation to the NAC (nipple-areolar complex) utilizing breast MRI.

Materials-Methods: A multicenter retrospective review of breast MRI studies from January 2022 to January 2023 was conducted. Patients with BI-RADS category 1 report on MRI were included, while those with breast cancer or prior breast surgery were excluded.100 breasts from 50 patients were assessed. The dominant blood supply to the NAC was based on the maximal filling of vessels observed 90 seconds post contrast administration. The blood supply was categorized into nine anatomical zones: superomedial (Ia), medial (Ib), inferomedial (Ic), superolateral (IIa), lateral (IIb), inferolateral (IIc), central (III), inferior (IV), and superior (V).

Results: Patients aged 23 to 64 years[Median 44yrs]. A total of 185 source vessels were identified (93 right, 92 left). Of these, 69 (37.3%) were in zone IA, 47 (25.4%) in zone III, and 42 (22.7%) in zone IIA. Among the 100 breasts, 39% had a single zone supply, 40% had two zones, 18% had three zones, and 3% had four zones. Of the 39 breasts with a single zone vascularity, 22 (56.4%) had type IA only blood supply. Of 61 breasts with multi-zone NACsomes, 15 (24.6%) had type IA+IIA supply, 8 (13.1%) had type IIA+III, and another 8 had type IA+III. Anatomic symmetry between both breasts was observed in 78% of patients.

Conclusion: MRI mammogram is effective for detailed NACsome mapping in vivo.A significant finding is the blood supply through the Wuringer septum (zone III), less emphasized in previous studies. Identifying this vascular pattern has important surgical implications for septal-enhanced therapeutic mammoplasty, contributing to safer and more effective oncoplastic reduction mammaplasty and nipple-sparing mastectomies.

Keywords: Breast, Magnetic Resonance Imaging, Nipple areola complex, NACsomes, Oncoplasty

[OP-037]
CORRELATION OF RADIOLOGICAL AND PATHOLOGICAL TUMOR SIZES IN EARLY-STAGE BREAST CANCER BASED ON MOLECULAR SUBTYPES AND PRESENCE OF IN SITU CARCINOMA: A RETROSPECTIVE MULTICENTER STUDY

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Purpose: To compare radiological tumor sizes obtained by mammography (MMG), ultrasonography (US) and magnetic resonance imaging (MRI) with pathological sizes and to determine whether there are any changes based on molecular subtypes and the presence of accompanying ductal carcinoma in situ (DCIS).

Methods: A total of 559 cases diagnosed with breast cancer in 11 different centers between 2010 and 2022 were included in the study. Tumor sizes were measured on the images downloaded from PACS and compared later with the pathologic sizes reported in the postoperative pathology reports. Comparison was performed based on patient age, imaging findings, breast density, histologic type (invasive/ in situ/ mixed), molecular subtypes and presence of accompanying benign or high-risk lesions. "Mann Whitney U" and "Kruskal Wallis H" tests were used for comparisons between groups, "Chi-Square or Fisher's Exact Test" was used to compare categorical variables, and "Spearman Correlation Analysis" was used to examine the relationship between continuous variables.

Results: The highest agreement in invasive tumors was obtained with MRI (MRI: 0.831, US: 0.769, MMG: 0.650). In the presence of DCIS, the agreement was strong with MRI (r: 0.770) and moderate with MMG and US (r: 0.517 and r: 0.593, respectively). In mixed tumors, agreement was strong with MRI (r:0.817), moderate with US (r:0.656), and low with mammography (r:0.499). Based on molecular subtypes, highest correlation was obtained with US and MRI in HER-2 (+) tumors (r:0.754, and r:0.715, respectively), and with MRI in other subtypes (Luminal A-B- triple (-)) with MRI (r:0.856-0.815-0.858; respectively). There was no statistically significant difference in terms of other criteria.

Conclusion: This multicenter study shows that MRI is the most reliable method in preoperative determination of tumor size for both invasive and in-situ tumors and all molecular subtypes.

Keywords: breast cancer, ductal carcinoma in situ, magnetic resonance imaging, molecular typing, neoadjuvant therapy

[OP-038]
ENHANCEMENT KINETICS ANALYSIS IN CONTRAST-ENHANCED SPECTRAL MAMMOGRAPHY: REGION OF INTEREST VERSUS VISUAL ASSESSMENT

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Aim of the study: Contrast kinetics analysis is an important assessment tool for breast lesions. Early and delayed phase contrast-enhanced spectral mammograms (CESM) are used in our unit to help with lesion characterisation. This is currently done with visual analysis. The aim of this study is to establish if visual assessment is comparable to manual region of interest (ROI) tool for assessing the pattern of contrast uptake in CESM.

Materials-Methods: Retrospective analysis of 61 CESM studies performed to assess disease extent for biopsy proven malignant breast lesions. Contrast uptake kinetics data were measured using the visual estimation and ROI measurement of the most enhancing area of the target lesion on early and delayed recombined image. The lesions' dynamics were classified as "progressive, plateau or washout". Kappa test for agreement between ROI and visual estimation methods was used.

Results: 46 (75.4%) out for the 61 breast cancers showed concerning (plateau or washout) kinetic patterns using the visual estimation method while ROI method revealed 42 (68.9%) cancers with concerning kinetics. 7 breast cancers were occult at both the visual and ROI methods. Kappa agreement between the two methods was 0.83 (93.4% agreement percentage), denoting very good agreement without statistically significant differences.

Conclusions: According to our results, there is very good agreement between the visual and ROI estimation methods of contrast kinetics analysis in CESM. Visual assessment can be used to assess tumour kinetics and help lesion characterisation.

Keywords: Contrast enhanced Mammography, CESM, Enhancement Kineticks

[OP-039]
EVALUATION OF THE AGREEMENT BETWEEN RADIOLOGY AND PATHOLOGY RESULTS AFTER NEOADJUVANT CHEMOTHERAPY IN BREAST CANCER PATIENTS: ASSESSMENT OF POSSIBLE PARAMETERS AFFECTING PATHOLOGICAL COMPLETE RESPONSE WITH PRE-TREATMENT BREAST MRI EXAMINATION

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Objective: In this retrospective study, we aimed to investigate the role of pre-treatment MRI features of tumors in prediction of pathological complete response (pCR) in breast cancer patients (BCP) recieving neoadjuvant-chemotherapy (NAC). Additionally to determine the tumor pre-NAC-MRI characteristics in patients who had radiological and post-surgical pathology concordance or discordance.

Methods: We reviewed data of 450 BCP underwented NAC between 02.2017 and 01.2023. Of these, 272 patients had both pre- and post-NAC-MRI data available, 259 of them had post-operative pathology results available (median age 46, mean age 47.8, range 26-84). Lesions were evaluated based on BI-RADS criteria on pre-NAC-MRI, assessing ADC values, MRI characteristics, lesion sizes, axillary lymph nodes. Molecular subtypes, histological types, Ki-67 proliferation index values were noted from biopsy results. Relationships between categorical data were assessed using chi-square and proportion tests, Shapiro-Wilk, Mann-Whitney-U, t-tests and Cohen's kappa value.

Results: Post-operative pathology results, 5.02% showed no response, 54.05% showed partially response, and 40.93% showed complete response to threatment. Statistical associations were found between pCR and ring enhancement type of mass lesions (p=0.0234), hyperintense signal on T2-weighted sequences (p=0.0216), small mass lesion size (p=0.0147), and high-ADC values of mass lesions (p=0.0045). In patients with concordant post-NAC-MRI and post-surgical pathology results, significant associations were found for axilla negativity (p=0.0138), large lesion size (p=0.0385), high-ADC value on pre-NAC-MRI (p=0.0498), and residual mass enhancement (p=0.0412).

Conclusion: Ring enhancement and high-ADC values of mass lesions, hyperintense signal on T2-weighted-sequences, and small lesion sizes were significant in predicting pCR from pre-NAC-MRI in BCP. Additionally, high-ADC values, larger lesion sizes, residual mass enhancement, and axillary lymph node negativity were statisticly in patients with concordant MRI and pathology results. However, these parameters alone are not reliable predictors for pCR and agreement between MRI and pathological results. Further studies with larger patient groups may provide more reliable results.

Keywords: Breast cancer, Breast MRI, Neoadjuvant-chemotherapy, Radiology-pathology concordance, Treatment response

[OP-040]
IMPACT OF OMITTING ROUTINE INTRAOPERATIVE FROZEN SECTION IN SENTINEL NODE BIOPSY FOR BREAST CANCER

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Introduction: By following Z0011 and AMAROS criteria, completion axillary clearance (ANC) can be omitted without compromising outcomes. We describe the change in our intra-operative frozen section (FS) policy to allow MDT discussion and de-escalation of axillary surgery.

Methods: Patients who underwent SNB with routine FS at St George's Hospital between August 2021-July 2022 were studied. Patient and tumour characteristics, FS result, final histology and surgical management were recorded. A subsequent study was performed between April-October 2023 when the unit stopped routine FS.

Results: In the first study (n=199), 17 patients had involved nodes on FS (7 had macrometastases and on-table ANC). Two with micrometastases at FS were found to have macrometastases and required ANC later. Paraffin sections confirmed macrometastases in further 5 cases (negative FS) but none required ANC following MDT (multidisciplinary team meeting) discussion. The false negative US rate was 11% (22/200). The overall ANC rate was 4.5% (9/199) but the on-table conversion rate was 3.5% (7/199). Eighty-six patients had SNB without FS. Eleven patients had macrometastases (12.7%) and later ANC was performed in 3 cases (3/86, 3.5%) based on high-volume disease in the sentinel nodes, presence of ECS (extracapsular spread) and large primary tumour size.

Conclusion: Our ANC rate dropped from 4.5% to 3.5%. Omission of FS allows formal MDT discussion and de-escalation of axillary surgery. It also reduces costs and pathology workload. Conversely, completion ANC later can be technically challenging and difficult to fit in due theatre capacity. Some units advocate selective FS in cases of post-neoadjuvant chemotherapy and high-risk disease.

Keywords: Frozen section, Sentinel node biopsy, Axillary surgery

[OP-041]
NOVEL EVIDENCE FOR DESIGNATING BREASTFEEDING AS THE STARTING POINT FOR IDIOPATHIC GRANULOMATOUS MASTITIS: A LARGE PROSPECTIVE MULTICENTRIC CASE-CONTROL STUDY

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Objectives: Idiopathic granulomatous mastitis (IGM) is a chronic disease with a disabling course and sequelae in some patients. Risk factors (RFs) have been evaluated, but retrospective design, small sample size or lack of a control group hampered strong results. We designed this large-scale multi-center prospective case-control study to clarify the RFs. Materials-Methods: RFs were evaluated in 1008 participants, 504 with histologically-proven IGM, and 504 with healthy breasts as the control group. Data were gathered through interviews by trained staff. The relation between RFs and IGM was evaluated by using multivariate binary logistic regression and 95% confidence intervals (CI). Results: The mean age of participants was 34.92±7.12 years. BF duration (BFD) was significantly higher in IGM patients, but the exclusion of those with no BF eliminated the difference (p=0.45). Results of the logistic regression analysis showed that IGM is directly associated with having ever breastfed (EB) (OR=7.51, 95%CI= 2.37-23.77) and diabetes (OR=4.23, 95%CI= 1.32-13.51); not associated with parity; and has a reverse association with OCP use (OR=0.70, 95%CI= 0.52-0.93). Gravidity and parity were significantly higher in IGM patients (p<0.001) but logistic regression rejected the association, implying that the detected difference in t-test was due to a confounder, probably EB. Conclusions: OCP consumption has extensively been suggested as a RF, but the low pooled prevalence showed in a meta-analysis and the non-significant indirect association detected in two small controlled studies is further reinforced in the present study by the demonstration of a protective role for OCP (p=0.004). Above all, EB induced a 7-fold increase in IGM risk (p=0.001), but BFD had no significant effect on it. This novel finding strongly supports the theory that milk stagnation is the starting point of IGM. Considering these results, we have led another study to further assess this relationship; results will be released soon.

Keywords: Case-Control Study, Granulomatous Mastitis, Lactation, Oral contraceptives, Risk Factor

[OP-042]
WHOLE-EXOME SEQUENCING: DISCOVERING GENETIC CAUSES OF GRANULOMATOUS MASTITIS

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Aim: Granulomatous mastitis (GM) is a benign disease but chronic, recurrent and adversely affects the quality of life and can be confused with malignancy. The treatment takes long and the treatment related complications are common. Therefore, it is important to focus on studies on the etiology of GM. The objective of this study is to assess the pathological variations in patients with GM disease by using whole exome sequencing and discuss the clinical significance of these genetic variants.

Material-Method: To perform single nucleotide polymorphism (SNP) and copy number variation (CNV) study analysis genomic DNA was extracted from 22 patients and 52 control subjects using QIAamp genomic DNA extraction kits. Whole exome sequencing, facilitated by Agilent's SureSelect Human All Exon V6 Kit, was exclusively conducted on these samples to enhance the detection of regions of interest within fragmented genomic DNA. Subsequent processing involved the conversion of FASTQ files to BAM files and further transformation into variant call format. Variants were annotated and evaluated using a comprehensive array of databases and in silico algorithms by using different verified Predictor programs. Analysis was performed utilizing the Human Genome Variation Society (HGVS) nomenclature, implemented through the VarSeq transcript annotation algorithm.

Results: Our study identified novel single nucleotide polymorphisms within BRCA2 (rs169547), CFTR (rs4727853), NCF1 (rs10614), PTPN22 (rs2476601), HLA-DRB1 (rs9270303, rs2308760, rs3830130, rs707953, rs701829, rs9269958, rs9270299) and C3 (rs406514) genes in patients with GM.

Conclusion: These findings represent the first reported associations between these specific SNPs and GM in the literature. Identifying these variants, particularly those related to the immune system and autoimmunity, strengthens the argument that GM is an autoimmune disease.

Keywords: Granulomatous mastitis, variations, whole exome sequencing, next generation sequencing, autoimmune disease

[OP-043]
COMPARISON BETWEEN TWO EX-VIVO CULTURE TECHNIQUES OF BREAST CANCER TISSUE

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Ex-vivo culture techniques have emerged as pivotal tools in breast cancer research, providing a bridge between in-vitro and in-vivo studies. Techniques such as organotypic cultures, tissue slices, and patient-derived organoids are commonly used ex-vivo methods. Organotypic cultures and tissue slices involve maintaining thin sections of tumor tissues, allowing the study of drug penetration in a context that closely mimics in-vivo conditions. These techniques involve the cultivation of breast cancer tissues outside the body under controlled conditions, maintaining the heterogeneity and structural cellular architecture and microenvironment more accurately than traditional cell lines. This preservation is crucial for understanding the complex interactions between cancer cells and their surrounding stromal cells, which play a significant role in tumor progression and response to therapies.

This study's aim was to compare two different organotypic ex-vivo culture methods using Matrigel ®, a gelatinous protein mixture derived from the basement membrane of the Engelbreth-Holm-Swarm (EHS) mouse sarcoma, and Ham F-12. The end-point was marker of proliferation Ki67. Results showed superior outcomes compared to studies found in the literature.

In conclusion, this study has showed a reliable ex-vivo culture technique which holds promise for improving personalized treatment strategies and understanding the intricate heterogeneity and dynamics of tumor microenvironments. By testing drug responses on cultured patient tissues, oncologists can tailor treatment plans based on the individual tumor's reaction to various chemotherapeutics and targeted therapies. This approach has the potential to improve treatment outcomes and reduce the trial-and-error process often associated with cancer therapy.

Keywords: ex-vivo, culture, Matrigel

[OP-044]
ARE CDK INHIBITORS MORE EFFECTIVE IN HER-2 NEGATIVE BREAST CANCER THAN IN HER-2 LOW DISEASE?

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Introduction: Hormone receptor positive tumors lacking HER2 over expression are the most common form of metastatic breast cancer. Recently, studies have been conducted on the necessity of different treatment approaches in HER2 low breast cancer patients than in HER2 negative patients. In our study, we investigated the effect of CDK 4/6 inhibitor use on disease-free survival and overall survival in patients diagnosed with HER2 low and HER2 negative metastatic breast cancer.

Material-Method: Our study was planned to compare retrospective, single-center CDK inhibitors in HER-2negative and HER-2low patient groups. Cases with metastatic hormone-positive breast cancer who applied to Selçuk University Medical Oncology outpatient clinic between 2020-2023 were included in the study. Patients were divided into two groups according to pathology reports and examined in terms of progression-free survival and overall survival. The first group includes HER-2negative patients and the second group includes HER-2 low patients.

Result: 98 patients were included in the study. 27 patients were in the HER-2 negative group and 71 patients were in the HER-2 low group. While the median PFS was not yet reached in the HER-2negative group, it was found to be 20.7 months in the HER-2 low group (p: 0.014)A statistically significant difference in PFS was observed between the two groups. There was no significant difference in overall survival in the Her-2 low and HER-2 negative groups. Overall survival was 28.3 months in the Her-2 low group, but not reached in the HER-2negative group (p: 0.112).

Discussion: Hormone-positive HER2-low metastatic breast cancer cases are a heterogeneous group with varying prognosis and sensitivity to systemic treatments. In our study, CDK inhibitors were found to be less effective in the HER-2 low group than in the HER-2 negative group. However, since different biology may be involved, the classification, approach and treatment of HER-2 low breast cancer must be customized.

Keywords: Breast cancer, HER-2 low, Her-2 negative, CDK 4/6 inhibitors

[OP-045]
COMPARISON OF GENESWELL BCT SCORE WITH ONCOTYPE DX RECURRENCE SCORE FOR RISK CLASSIFICATION IN TURKISH WOMEN WITH HORMONE RECEPTOR-POSITIVE, HER2- NEGATIVE, EARLY BREAST CANCER

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Objective: The GenesWell Breast Cancer Test (BCT) is an advanced multigene assay designed to predict the likelihood of distant recurrence in patients with early-stage breast cancer. This study evaluates the concordance between the BCT score and the Oncotype DX recurrence score (RS) for risk stratification among Turkish patients with pN0-N1, hormone receptor-positive, human epidermal growth factor receptor 2 (HER2)-negative breast cancer.

Materials and Methods: Two-hundred fifteen formalin-fixed, paraffin-embedded breast cancer tissues previously analyzed using the Oncotype DX assay, were re-evaluated with the GenesWell BCT test. Ninety of them passed BCT quality control. The risk stratification outcomes from both assays were then compared.

Results: Ninety patients from a single institution in Turkey were included in the analysis. In overall, 56 patients (62.2%) were classified as low risk, while 34 patients (37.8%) were categorized as high risk based on the BCT score. In comparison, using the RS ranges defined in RxPonder, TAILORx, and Adjuvant Online, 63 patients (70%) were identified as low risk, and 27 patients (30%) as high risk. The BCT high-risk classification showed a 67.8% concordance (95%CI: 58.1% - 77.4%) (Table 1). Lymph node positive patients were small in sample size for both pre-menopause (n=7) and post-menopause (n=13) group, thus, subgroup analysis were performed for pN0 patients according to menopausal status. (Table 2 and 3)

Conclusions: The concordance between the BCT score and RS was good either in pre-menopause or post-menopause women who are lymph-node negative. Sample size was insufficient to assess node-positive population. Further studies are necessary to identify more accurate tests for predicting prognosis and chemotherapy benefit in node-positive subpopulation.

Keywords: BCT score, GenesWell BCT assay, HR+/HER2– early breast cancer, concordance, early breast cancer, Oncotype DX recurrence score, risk classification..

[OP-045]

Table 1. Concordance analysis of Oncotype Dx and GenesWel BCT in overall patients.

		Oncotype-Dx			
		Low	High	n	(%)
GenesWell BCT	Low	45	11	56	62.2
	High	18	16	34	37.8
	n	63	27		
	(%)	70	30		
		Value	95% CI		p-value
Sensitivity		59.3%	40.7%	77.8%	>0.05
Specificity		71.4%	60.3%	82.6%	*<0.05*
PPV		47.1%	30.3%	63.8%	>0.05
NPV		80.4%	70.0%	90.8%	*<0.05*
Accuracy/Concordance		67.8%	58.1%	77.4%	*<0.05*

Table 2. Concordance analysis of Oncotype Dx and GenesWel BCT in pN0 post-menopause patients.

		Oncotype-Dx			
		Low	High	n	(%)
GenesWell BCT	Low	17	2	19	79.2
	High	4	1	5	20.8
	n	21	3		
	(%)	87.5	12.5		
		Value	95% CI		p-value
Sensitivity		81.0%	64.2%	97.7%	>0.05
Specificity		33.3%	-20.0%	86.7%	*<0.05*
PPV		89.5%	75.7%	103.3%	>0.05
NPV		20.0%	-15.1%	55.1%	*<0.05*
Accuracy/Concordance		75.0%	57.7%	92.3%	*<0.05*

Table 3. Concordance analysis of Oncotype Dx and GenesWel BCT in pN0 pre-menopause patients.

		Oncotype-Dx			
		Low	High	n	(%)
GenesWell BCT	Low	24	6	30	65.2
	High	6	10	16	34.8
	n	30	16		
	(%)	65.2	34.8		
		Value	95% CI		p-value
Sensitivity		80.0%	65.7%	94.3%	*<0.05*
Specificity		62.5%	38.8%	86.2%	>0.05
PPV		80.0%	65.7%	94.3%	*<0.05*
NPV		62.5%	38.8%	86.2%	>0.05
Accuracy/Concordance		73.9%	61.2%	86.6%	*<0.05*

[OP-046]
REAL-LIFE USE AND DECISION IMPACT OF MAMMAPRINT ON CLINICAL PRACTICE IN EARLY BREAST CANCER: A MULTICENTER TURKISH ONCOLOGY GROUP STUDY

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Background: Mammaprint (MP) test is a prospectively validated genomic tool for EBC patients with HR positive Her-2 negative tumors to predict risk of recurrence. We evaluated the impact of MP test on adjuvant chemotherapy (ACT) decision and clinical outcome in routine clinical practice.

Methods: MP test results, patient/tumor characteristics, adjuvant therapy details and relapse patterns were retrospectively collected for patients who had MP test between 2013-2023 from 24 centers. Results: Median follow up was 40 months. Among 444 patients 59% had clinical high risk (cHR) and 41% had clinical low risk (cLR) disease. Forty-four % of patients had genomic HR and 56% had genomic LR. Median age was 48, 60% were premenopausal, 4% patients were <35 years-old, 31% had NP disease, 70% had grade 2 and %63 had T1 tumors. The percentage of cHRgLR, cHRgHR, cLRgHR and cLRgLR risk patients were:31%, 28%, 16%, 25% respectively. Five- year DMFS for cLRgLR, cLRgHR, cHRgHR, cHRgLR patients were 100, 98, 93 and 96% respectively. Forty-two % received ACT, 81% received ART, 34% received OFS. Among 16 relapses, 12 were distant metastases (DM) and there wasone death due to metastatic BC. Pre-test and post-test ACT recommendations were 68% and 42% respectively. Among 263 patients cHR disease, 48% had gHR MP result. Four % of patients with cHRgLR and 91% of patients with cHRgHR disease received ACT. There were 6 and 5 DMs in cHRgHR and cHRgLR groups. Systemic therapy decision was changed from CT to endocrine therapy (ET) only in 41% of patients with cHRgLR disease. Five-year DM free survival in patients who had cHRgLR disease and who do not received ACT (n: 131) was 98%. Conclusion: Real-life outcomes with MP utilization is similar to MINDACT study outcomes; with 98% 5 year DMFS and avoidance of ACT in 41% of patients with cHRgLR disease.

Keywords: Breast Cancer, Mammaprint, genomic test

[OP-047]
INDIA'S EXPLORATION OF NEXT-GENERATION SEQUENCING: PROTEOMICS-BASED PROGNOSTIC SIGNATURE REDEFINING THE RISK GROUPS IN HR+/HER2- BREAST CANCER AND COMPARATIVE ANALYSIS WITH GRADE, KI67 AND NOTTINGHAM PROGNOSTIC INDEX

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Objective: The dilemma persists on whether to administer adjuvant chemotherapy in stage I/II HR+ and HER2-negative invasive breast carcinoma. This study aimed to analyze the outcomes of the CanAssist Breast (CAB) Test(costing less than 1000USD) alongside established risk markers like Ki67 index, Nottingham Prognostic Index (NPI), and tumor grade, validating findings in the Indian context.

MATERIALS & Methods: We conducted a retrospective observational study of 137 patients with stage I/II HR+ and HER2-negative invasive breast carcinoma who underwent the CAB test. Patients were categorized into high and low risk groups based on a CAB cutoff score of 15.5. We evaluated correlations between CAB scores and tumor grades; NPI levels (low, intermediate, high) and Ki67 scores. Statistical analyses included Chi-Square tests to determine the associations between categorical variables.

Results: 94/137 (67%) patients had low CAB scores. Grade 3 tumors were significantly associated with high CAB scores (12 out of 20; $p<0.001$), Grade 2 tumors were associated with low CAB scores (95 out of 107; $p=0.006$). Significant associations were observed between NPI levels and CAB scores ($r2=0.8797$; $p<0.001$), with the majority of intermediate NPI cases (73 out of 92) demonstrating low CAB scores. Additionally, most cases with moderate (59 out of 69) and high (53 out of 66) Ki67 indices were associated with low CAB scores. It identified low risk patients within node-positive (N1) group also (6 out of 19). None of the CAB low score patient escaping chemotherapy has recurred till last follow-up.

Conclusion: The CanAssist Breast test proves effective in an appropriate risk stratification and minimizing the overtreatment with chemotherapy compared to traditional prognostic tools like Ki67, tumor grade, and NPI. This approach benefits patients falling within ambiguous marker ranges (Grade 2, intermediate NPI, and moderate Ki67), who can avoid chemotherapy and related toxicities based on CAB score-based assessments.

Keywords: CAB test, Adjuvant chemo + endocrine/endocrine alone, HR+/HER-2-, Stage 1/2 breast cancer

[OP-048]
REAL-WORLD DATA ON PROGNOSTICATION OF EARLY-STAGE BREAST CANCER PATIENTS USING CANASSIST BREAST: FIRST IMMUNOHISTOCHEMISTRY-BASED PROGNOSTIC TEST DEVELOPED AND VALIDATED ON ASIANS

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OncoStem Diagnostics Pvt Ltd

Objective: Data on prognostication of Asian HR+/HER2- early stage breast cancer patients using Western prognostic tests is limited and intriguing. Asian patients get diagnosed almost a decade earlier and typically in Stage II thus the underlying tumor biology could be different. CanAssist Breast (CAB)- an immunohistochemistry and artificial intelligence based prognostic test developed on Indian patient's tumors and validated in retrospective global studies in India, US, Spain, Germany, Austria, Italy and via TEAM trial in The Netherlands. Since mid 2016, CAB is in clinical use in South East Asia, UAE and Turkey. Here we assess the usefulness of CAB in treatment planning.

Methods: We analysed retrospective and prospective CAB user data over last ~8 years. Specifically, how does CAB help in "clinically low/high" risk patients-Ki67 index, age, stage of breast cancer.

Results: In retrospective analysis, CAB helps to identify ~15% patients with <5% Ki67 and ~12% patients who have T1T2N0 disease as "high risk" with DRFI of ~84%. Interestingly, CAB helps to identify ~13% pre-menopausal 'high-risk' patients who can get additional treatments. Prospectively, CAB is used on 5000+ HR+/HER2- breast cancer patients. Overall, 73% of the total patients are over 50 years of age, 63% with T2, 65% with Grade 2 tumors and 82% with N0 disease. Median age of patients and tumor size are 58 years and 2.5 cms respectively. T2N0 is most represented (51%) while T1N1 and T2N1 together account for ~20%. Overall, 74% patients have been stratified as 'low-risk' for breast cancer recurrence. Majority of the patients have been from private hospitals thus leading to significant savings of the chemotherapy and associated side effect management costs.

Conclusion: CAB represents tumor biology of younger patients and coupled with world-wide validation it presents as a cost-effective, ideal alternative to western prognostic tests to patients in Asia, Africa and ME.

Keywords: cost-effective prognostication, early stage breast cancer, Asian patients

[OP-049]
REAL-LIFE USE OF ONCOTYPEDX AND ITS IMPACT ON CLINICAL OUTCOME OF PREMENOPAUSAL EARLY BREAST CANCER PATIENTS

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Background: Most premenopausal EBC patients with HR positive disease receive adjuvant chemotherapy (ACT).Biology of disease in younger women, the use of suboptimal ET in prospective studies testing genomic signatures might be potential reasons for this approach. We evaluated the impact of Oncotype Dx guided treatment decisions in premenopuasal EBC patients.Methods: Clinical, pathologic information, clinical outcome data were collected retrospectively for 150premenpusal patients. Results: Median age was 43, Median follow up was 81 months. OncotypeDX was low (L), intermediate (I)and high (H) risk in 15%, 69% and 16 % of the patients respectively. Seventy-two % had breast conserving surgery, 80% had ID histology, T1/T2 tumors were present in 77/23% of patients, 71% had node negative (NN), 80 % HAD HG2 tumors. Thirty % of patients received ACT, 84% received ART, 45% received adjuvant tamoxifen and 55% received OFS. Thirty-nine %, 60% and 50% of patients with L,I and H RS received OFS. Sixty-eight % of NP, 50% of NN patients, 49 % of patients who received ACT had OFS. Sixteen patients had relapsed, 8 had distant metastases (2 had NP disease, 2 received ACT, 5 received OFS, 1 had H, 5 had I, 2 had L RS), 4 patients died due to BC. 10-yr DMFS and OS were 94 % and 95% for the whole group;90 and 94 % in patients who received no ACT and 94, and 96% in patients who received ACT. Among patients with NN disease, 10 yr DMFS and OS were 91 and 93% for patients who do not received ACT and 95 and 94% for patients who received ACT. Conclusion: With optimal ET premenopausal patients might forgo ACT. However, premenopusal patients with L and I RS might still relapse and die, heralding complex biology of BC in premenopausal women and the need for additional therapies.

Keywords: Breast cancer, premenopausal women, OncotypeDX

[OP-051]
EFFECT OF HER2 STATUS ON PATHOLOGICAL COMPLETE RESPONSE AFTER NEOADJUVANT CHEMO-IMMUNOTHERAPY IN TRIPLE-NEGATIVE BREAST CANCER

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Background: HER2-low tumors constitute %30-40 of hormone-receptor negative tumors. There are conflicting results on the impact of low HER2 expression on response to chemotherapy; while some suggest that low HER2 expression may reduce the effectiveness of chemotherapy, others indicate no effect. This study investigates the impact of HER2 status on pathological response (pCR) to neoadjuvant chemo-immunotherapy in early-stage triple-negative breast cancer (TNBC).

Materials-Methods: Patients with unilateral TNBC who received neoadjuvant chemo-immunotherapy between 2021 and 2023 at Acıbadem University Hospital were retrospectively analyzed. Patients were grouped as HER2-0 and HER2-low. HER2-low was defined as IHC 1+ or IHC 2+ and FISH-. The primary endpoint was pCR (ypT0ypN0).

Results: Out of the 56 patients included, 75% (n=42) had HER2-0 and 25% (n=14) had HER2-low disease. The median age was 45.6 years. 87.5% had T1/2 tumors and 12.5% had >=T3 tumors. 64.3% had axillary node involvement. Ki67 expression was similar in both groups, with a mean of 50% in HER2-0 and 45.6% in HER2-low groups, respectively. Tumor grade was significantly higher in the HER2-0 group (78% vs 66.7%, p=0.003). Mastectomy rates were similar between the two groups (p=0.439). The need for axillary lymph node dissection (ALND) was found significantly higher in the HER2-low group (9.5% vs. 35.7%, p=0.035). Overall pCR rate was 64.3%. Although the pCR rate was higher in the HER2-0 group compared to the HER2-low group, it did not reach statistical significance but showed a trend favoring HER2-0 (71.4% vs 42.9%, p=0.053).

Conclusion: The HER2-low group exhibited lower rates of pCR and a higher requirement for ALND compared to the HER2-0 group, suggesting that HER2-0 tumors may respond better to neoadjuvant chemo-immunotherapy. The predictive value of HER2 status on pCR in patients undergoing neoadjuvant chemo-immunotherapy warrants further evaluation with a higher number of patients.

Keywords: Triple negative breast cancer, pathological complete response, neoadjuvant chemoimmunotherapy

BREASTANBUL 2024

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POSTER PRESENTATIONS

[PP-002]
THE MYSTERIES OF THE SNOWSTORM - CASE REPORT OF A FEMALE PATIENT WITH BILATERAL BREAST AUGMENTATION FILLERS AND MALIGNANCY DIAGNOSED WITH MAGNETIC RESONANCE IMAGING

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Breast cancer remains one of the most common cancers in females and early detection is pivotal in translating to better outcomes for patients. The diagnostic conundrum in patients with breast cancer and a history of augmentation material lies in the detection of malignancy on breast imaging as the augmentation material significantly reduces the sensitivity of mammography. MRI (Magnetic resonance imaging) supersedes routine mammography in this group of patients and has demonstrated higher sensitivity and sensitivity detection rates in patients with augmented breasts in identifying malignant pathologies.

In this case report we present a female patient in her 70s with bilateral breast silicone fillers which were performed more than 30years ago. She presented to our institution for evaluation of an enlarging right breast lump with associated nipple retraction. Physical examination confirmed a palpable 6cm breast lump next to the nipple associated with nipple retraction, no associated skin changes and the axilla was unremarkable. The mammogram and ultrasound yielded limited information to the presence of fillers which the patient did not disclose of during her first consultation. MRI breasts was pursued after which revealed an irregular speculated lesion and was eventually biopsied and proven to be malignant. In the case report, we are looking to discuss the diagnostic challenges due to the underlying breast fillers and the subsequent management of our patient.

Keywords: breast fillers, MRI, breast cancer

[PP-004]
GRANULOMATOUS MASTITIS- A RADIOLOGICAL ASSESSMENT OF THE CLINICAL PRACTICE

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Granulomatous mastitis, (GM) may be classified as idiopathic where the aetiology remains inconclusive despite standard radiological and pathological assessments. It is a rare benign entity that typically affects post-partum pre-menopausal women. Infective and inflammatory systemic granulomatous diseases share a similar clinical presentation. Our unit correlated a year of ultrasound-guided core biopsies positive for GM with culture, staining and PCR testing, to assess if a high expat penetrance with prevalence for endemic tuberculous (TB) disease has resulted in an increased number of GM cases.

This retrospective study analysed samples recruited from the symptomatic breast clinic between 01.03.2021 and 28.02.2022 with a total of 12 patients; included were those who had GM on their pathological report, 2 patients were excluded since one had a surgical biopsy and the other had a sentinel lymph node biopsy, as part of ipsilateral mastectomy. The age ranged between 25 and 74 years and one was breastfeeding. Patients received sonographic and mammographic assessment of at least the affected breast. None of our patients had magnetic resonance imaging.

At ultrasound, these lesions were predominantly described as having hypo to mixed echogenicity with slight irregular borders. BSBR grading ranged from U2 to U4/5 with one U4 turning out to be a breast cancer and the U4/U5, a foreign body granuloma. 42% received a mammogram; lesions were described as well-defined round masses or asymmetric densities, graded as M1, mammographically occult or M3, indeterminate, probably benign. At histology, samples were sent for microscopy, culture and staining, and some undergone PCR testing. All testing was negative for TB. However, one showed grade 3 invasive ductal carcinoma with necrotizing granulomatous inflammation.

In GM, image-guided core-sampling may not explain the aetiology but excludes more sinister pathology, it being a great mimicker of breast cancer. Individualized patient assessment may propose the origin; when inconclusive, this is flagged as idiopathic.

Keywords: Granulomatous mastitis, Tuberculous disease, Mimicker of breast cancer

[PP-005]
ACCURACY OF SHEAR WAVE ELASTOGRAPHY IN CHARACTERISING BENIGN AND INDETERMINATE BREAST MASSES

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Solid breast masses in patients who are less than 25 years and demonstrate benign grey- scale ultrasound imaging (U2), are not sampled. Shear-wave elastography (SWE) has proven to be accurate in differentiating benign and malignant masses. Our aim is to assess the sensitivity and specificity of SWE in sonographically benign and indeterminate breast masses.

A retrospective analysis of 190 patients with 193 lesions, between 17 to 89 years, from May 2020 till May 2022 was done. The B-mode imaging was scored according to the RCR 5-point grading system; U2 and U3 lesions were included. Lesions were classified as soft or hard on SWE using a cut-off of less than 50kPa as being soft.

All 30 U2 lesions with a soft SWE had benign histology. 2/26 U3 lesions with soft SWE were malignant. One represented an inflammatory cancer, known in the literature to be a cause for falsely negative SWE value; the other had inadequately placed ROIs due to extreme stiffness of the tumour. The lowest SWE value recorded for malignancy was 14.4kPa. 1/24 U2 lesions with hard SWE was malignant. 16/43 U3 lesions with a hard SWE were malignant. A soft SWE for U2 lesions was 100% sensitive, 56.6% specific with a false positive rate of 95.8% and false negative rate of 0%. A soft SWE for U3 lesions was 88.9% sensitive, 52.9% specific with a false positive rate of 67.2% and false negative rate of 7.7%.

Overall SWE has good sensitivity with low specificity for benign lesions. The negative predictive value is 100% for U2 lesions. Therefore U2 lesions with soft SWE may in time not be sampled, improving quality of patient care and reducing the burden on the resources. However, any lesion which is classified as U3 or has a hard SWE will continue to merit a biopsy.

Keywords: Shear wave elastography, Benign and indeterminate solid breast masses, Breast biopsy

[PP-006]
A PILOT IN-VITRO FEASIBILITY STUDY OF A PROPOSED NOVEL BIODEGRADABLE BREAST CLIP MARKER

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Background: Small permanent metallic clip markers are commonly deployed after needle biopsy sampling. In the event the histology from the biopsy is found to be non-cancerous, the breast marker usually becomes of no particular use. There is, therefore, a role for a non-permanent marker which can biodegrade and disappear after some time.

Aim: To conduct an in-vitro feasibility study on a prototype radio-opaque, biodegradable breast marker using the polylactic-co-glycolic acid (PLGA) co-polymer.

Methods: 2mm biodegradable markers made up of the copolymer polylactic-co-glycolic acid with varying polylactic acid to polyglycolic acid molar ratios of 50:50, 75:25, and 82:18 were incubated in an aqueous medium. The higher the polylactic acid content, the biodegradation is expected to be slower. Barium sulphate was added as a radio-opacifier. Rate of biodegradation was observed with x-ray over 1-9 months.

Results: Formulations of 50:50 and 75:25 demonstrated radiographic visibility up to a month while 82:18 showed visibility up to 9 months on in-vitro x-ray imaging.

Conclusion: This pilot in-vitro study demonstrated the feasibility 0f manufacturing a temporary, biodegradable breast marker using PLGA material. More studies are required to find the right material mix to achieve a reliable rate of biodegradation, and also to determine the biosafety of the markers in-vivo.

Keywords: biodegradable, breast biopsy markers, polylactic-co-glycolic acid

[PP-008]
PRIMARY MAMMARY ANGIOSARCOMA

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Angiosarcoma is a rare malignant neoplasm showing morphological features or immunohistochemistry profile of endothelial differentiation. This cancer can occur anywhere in the body but usual locations include skin of the head and neck, visceral organs or connective tissue. According to National Cancer Institute, angiosarcomas make up to about 1-2% of all sarcomas. In the breast, angiosarcoma is the most common type of sarcoma, with a prevalence of 0.05% of malignant breast cancers. It is classified into primary or secondary, with the latter occurring in patients with a history of chest radiation exposure. Secondary angiosarcomas typically arise superficially from the skin whilst primary angiosarcomas tend to arise from a deeper location. Primary angiosarcomas have a median age of 40 compared to secondary angiosarcomas which are commoner over the age of 70. Patients are usually offered extensive surgery for complete excision. Despite aggressive treatment, prognosis is poor in view of loco regional recurrence and risk of metastasis to local lymph nodes, with 3.5% having either clinical or pathological nodal involvement. The most frequent sites of distant metastatic disease are lungs, liver, bones and central nervous system. A case study of a 57-year-old female with no history of chest radiation exposure, presented with a palpable lump in the immediate retro-areolar left breast which was increasing in size is reported. This was diagnosed as primary angiosarcoma. Staging CT did not show any distant metastasis however showed incidental intra-hepatic biliary dilation. In view of this, an MRI was performed which revealed suspicious osseous lesions which were confirmed to be metastatic on histology. A literature review is also presented.

Keywords: angiosarcoma, primary, rare, metastatic

[PP-009]
DIAGNOSTICS OF MULTIPLE BREAST CANCER USING TRIDIMENSIONAL ULTRASOUND AND 2D - SHARE WAVE ELASTOGRAPHY

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Objective: The multifocal (MF) and multicentric (MC) breast cancer (BC) have high frequency, especially during premenopausal or menopausal, with high risk of recurrence and lymph nodes metastasis.

Early diagnosis and the following of the evolution is important for the therapeutic algorithm and prognosis.

Materials and methods: We selected a sample of 94 patients, between 45-65 years, during January 2023 - April 2024, with palpable or non palpable mass, diagnosed with more than two breast malignant lesions unilateral or controlateral.

We performed tridimensional ultrasound (Automated Breast Ultrasound Scanning - ABVS) and elastographic stiffness, Virtual Touch imaging (VTI) and Virtual Touch Imaging Quantification (VTIQ), using ACUSON S2000, by two physicians.

Results: Our findings expressed multifocal with two or more breast tumors in same quadrant and multicentric, more lesions than two, in different quadrants and breast. Both types represent 10% of patients with breast cancer, being more aggressive than single breast cancer, having a poor prognosis. Multicentric breast cancer has a high recurrence and aggression greater than multifocal, depending on the molecular subtypes and differentiate of the degrees.

In lobular associated with ductal carcinoma we found in VTIQ, high stiffness elasticity values up to 5.80m/sec, than healthy tissue and coronal retraction in ABVS. In ductal invasive carcinoma and in situ, the stiffness of lesions were more less 5.0m/sec. In 86 - 90% of cases were associated metastatic lymph nodes.

Our obtained results join those of the studies with high sensitivity 91% and accuracy up to 94% with correlated methods, in the tumor and lymph nodes monitoring, during therapy.

Conclusions: The elastography, as a virtual biopsy and ABVS are no irradiation techniques, repetitive, increasing the confidence to evaluate the chemotherapy and radiotherapy response.

Keywords: breast cancer, multicenter, multifocal, elastography, ABVS

[PP-011]
COMPARISON OF THE EFFECTIVENESS OF IMAGING METHODS IN DETERMINING TUMOR SIZE BEFORE BREAST SURGERY FOR DCIS

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Objective: This study compares the effectiveness of mammography, ultrasound, and MRI in determining the pathological tumor size and surgical method for patients with ductal carcinoma in situ (DCIS).

Materials-Methods: We retrospectively reviewed radiological imaging and pathology reports of 45 patients operated on for DCIS between January 2016 and November 2022. Patients aged 31-65 with preoperative mammography, ultrasonography, and MRI images, and no invasive component in the final pathology, were included. The accuracy criterion was the largest DCIS area within ± 0.5 cm of the final pathology report. Patients were divided into subgroups by age (under and over 50 years) and presence of microcalcification. The accuracy of each imaging method was compared to the pathological tumor size using Pearson correlation analysis.

Results: The mean age of patients was 47.7 years. The largest pathological tumor size ranged from 9 mm to 67 mm. Correlation coefficients for tumor sizes detected by mammography, ultrasonography, and MRI versus pathological tumor size were 0.765, 0.612, and 0.763, respectively. For patients over 50, coefficients were 0.741, 0.675, and 0.731, while for those under 50, they were 0.767, 0.598, and 0.771. In the presence of microcalcification, coefficients were 0.774, 0.616, and 0.718, while without microcalcification, they were 0.711, 0.534, and 0.744. Surgical planning was changed in 5 patients (11.11%) over 50 with microcalcification when mammography + MRI were reviewed.

Conclusion: Mammography and MRI are superior to ultrasonography in determining tumor size and predicting pathological tumor size in DCIS patients. Mammography is most effective for patients over 50 with microcalcification, while MRI is most effective for those under 50 without microcalcification.

Keywords: Ductal carcinoma in situ (DCIS), mammography, ultrasound, MRI, tumor size

[PP-012]
IS MRI SUPERIOR TO US IN NEWLY DIAGNOSED EARLY-STAGE BREAST CANCER TREATED WITH UPFRONT SURGERY?

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Objective: Diagnostic methods in Breast cancer (BC) primarily include mammography (MMG), which is observed to be effective in detecting BC; however, ultrasound (US) and magnetic resonance imaging (MRI) offer distinct advantages when indicated. In this study, we aimed to ascertain whether preoperative imaging with MRI provides additional benefits in patients newly diagnosed with early-stage BC that were initially identified using MMG and US.

Materials and Methods: A retrospective analysis included 100 BC patients treated from January 2014 to December 2023. All underwent US and MMG, with subsequent MRI before upfront surgery. Pathology and imaging reports were compared.

Results: All patients 100 (100%) underwent MRI and US examinations before surgery. In 14 (14.0%) of these patients, MRI detected an additional focus that could not be found with US, whereas in 76 (76.0%) did not detect. Subtype distribution reveals 50% Luminal A, 35.7% Luminal B, and smaller percentages for Her2+ and triple-negative in the first group, compared to 57%, 29.1%, 9.3%, and 4.7% respectively in the second group (p:0.832). Breast density in mammography indicates varying distributions across types A to D (p:0.647). Menopause status shows similar distributions in both groups: 42.9% premenopausal/perimenopausal and 57.1% postmenopausal in the first group, compared to 44.2% and 55.8%, respectively (p:1.000). In thirty-eight patients who underwent mastectomy in this study, the concordance of pathology results with imaging results were also compared. Specifically, US demonstrated a sensitivity of 81.58%, while MRI showed a slightly higher sensitivity of 89.47%. When comparing the sensitivity of US and MRI, no statistically significant difference was found.

Conclusion: In conclusion, although MRI sensitivity is better for evaluating lesions in the breast, this study demonstrates that it may not be necessary to evaluate every patient with MRI when an experienced radiologist performs US.

Keywords: magnetic resonance imaging, ultrasound, breast cancer

[PP-014]
OPPORTUNISTIC SCREENING MAMMOGRAPHY IN WOMEN OVER 40 ATTENDING THE ONE STOP BREAST CLINIC IN THE UK. IS IT TIME FOR A CHANGE IN RECOMMENDATIONS OR GUIDELINES?

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Background: Breast cancer is the most frequently diagnosed cause of death from cancer in women worldwide. Largely due to delayed presentation it is the leading cause of death from cancer in low- and middle-income countries. Population based breast screening programmes aim to reduce mortality, as well as treatment induced morbidity, through early detection. To date, these programmes are targeted at women purely based on age and are not risk stratified.

Due to increased awareness, symptomatic breast clinics are inundated with women that are referred with a variety of breast symptoms. Most of these women do not have any clinical signs, and the examination is normal, however, again based on age these "worried well" women are offered mammograms based on local, regional and national guidelines. This population forms a cohort of women that are offered opportunistic breast screening despite a normal physical examination. There is limited data on whether these opportunistic screeners have the same or indeed any benefit as the population based screening cohort.

Methods: At a busy tertiary referral academic breast unit seeing close to 200 symptomatic women a week, we designed a retrospective study to look at number of cancers detected in symptomatic women with a normal physical examination. Using electronic patient hospital records, we aim to look at the mammogram reports of all women referred between June 2023 to September 2023, with a normal clinical examination.

Results: The study is in progress and we aim to have the data in time for the conference. We speculate that the number of "incidental" breast cancer diagnosis in this cohort of women will be very low.

Conclusion: Based on our results we could be in a position to inform societies and health care policy makers on the benefit of opportunistic screening and whether it makes economic sense to continue.

Keywords: opportunistic screening, mammogram, breast cancer

[PP-015]
DEVELOPMENT OF AN AI-BASED HYBRID MODEL FOR BREAST CANCER MANAGEMENT

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Management of breast cancer varies in several aspects such as tumor size, endocrine receptor (ER) status, human epidermal growth factor receptor 2 (HER2) status, axillary lymph node (LN) involvement, and metastatic spread. Therefore, identifying these parameters in the preoperative stage is crucial, as this data provides evidence to decide on adjuvant therapy and plan the surgical approach, thereby facilitating pre-treatment decisions. Preoperative imaging plays a vital role in this decision-making process. Recently, artificial intelligence methods using deep convolutional neural networks (DCNNs) have been widely applied in medical image analysis. Additionally, data mining and machine learning techniques are used in processing structured data such as physical examination findings and patient history. These innovative hybrid techniques can make critical contributions to cancer management.

We developed an AI-based hybrid method for evaluating breast cancer, axillary status, and molecular subtype. For this purpose, a dataset comprising MR, US, digital breast tomosynthesis, mammogram images, and medical histories of primary breast cancer patients who underwent surgery between 2015-2022 at Kocaeli University Hospital was used. A random and independent set was also used for testing the model. The results achieved by the model were:

bbox_mAP_50: 0.875 (MR)
bbox_mAP_50: 0.6760 (MG)
bbox_mAP_50: 0.7770 (US)

Conclusion: The AI-based hybrid model demonstrated high performance in predicting breast cancer, its molecular subtype, and the presence of axillary lymph node metastasis. Integrating medical imaging with structured clinical data through advanced AI techniques holds significant potential for enhancing diagnostic accuracy and informing preoperative decision-making. This approach not only streamlines clinical workflow but also improves personalized treatment planning for breast cancer patients. Further research should focus on refining these models and validating them across larger, more diverse patient populations to ensure broader applicability and reliability.

Keywords: DL, AI, Breast Cancer

[PP-016]
FACTORS ASSOCIATED WITH UPGRADE AFTER SURGICAL EXCISION IN PATIENTS DIAGNOSED WITH DUCTAL CARCINOMA IN SITU VIA PERCUTANEOUS BIOPSY

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Objective: To evaluate the relationship between clinical, radiological, and histopathological findings, biopsy techniques, and the occult invasive component (OIC) in patients diagnosed with ductal carcinoma in situ (DCIS) via percutaneous breast biopsy.

Materials and methods: This multicenter retrospective study included women diagnosed with DCIS via imaging-guided needle biopsy who underwent surgical excision between 2011 and 2024. Clinical, radiological, and histopathological findings were assessed. Statistical analyses employed Student's t-test for continuous variables and the chi-square test or Fisher's exact test for categorical variables.

Results and conclusions: The overall upgrade rate in the final pathology was 18.5% (38/205). The mean size of the lesions was (±SD) 37.3 mm ± 29.4 (range: 4-135). On biopsy pathology, 68.2% (140/205) of lesions were grade 3, 22.9% (47/205) were grade 2, and 8.7% (18/205) were grade 1. Physical examination findings were present in 22.9% (47/205) of cases, whereas 77.1% (158/205) were detected during screening. While 80% (164/205) of the lesions appeared as calcifications or non-mass findings on radiological imaging, 20% (41/205) presented as masses. Out of the cases, 116 (56.5%, 116/205) were diagnosed with ultrasound-guided biopsy, 85 (41.4%, 85/205) with mammography-guided biopsy, and 4 (1.9%, 4/205) with magnetic resonance imaging-guided biopsy. Core needle biopsy (CNB) was used to diagnose 60.9% (125/205) of the cases, whereas vacuum-assisted biopsy was performed in 39.0% (80/205). The mean number of biopsy samples in CNB was (±SD) 7.1±4.3.

The presence of physical examination findings ($p=0.024$), the presence of a mass finding on radiological imaging ($p<0.001$), the use of ultrasonography as a biopsy modality ($p=0.003$), the use of CNB as a biopsy technique ($p=0.012$), and a low number of biopsy samples in CNB ($p=0.031$) were significantly associated with OIC. Consequently, the risk of underestimation in the presence of these factors must be taken into account.

Keywords: Breast Ultrasonography, Ductal Carcinoma In Situ, Magnetic Resonance Imaging, Mammography, Needle Biopsies

[PP-018]
PREGNANCY ASSOCIATED BREAST CANCER PATIENTS HAVE ADVANCED DISEASE PRESENTATION COMPARING WITH NON-PREGNANT PEERS

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Purpose: We aim to compare the demographic, clinico-pathological features and survival data among pregnancy associated breast cancer (PABC) and their non-pregnant peers.

Methods: Sixteen patients with PABC among 186 breast cancer patients under 40 years-old were investigated.

Results: The median age 37 (range, 23-40 years). Most of the patients were clinically T3 & T4 (n=98; 70 %) and clinically node positive 53% (n = 98). Presenting median age of PABC patients was lower [32.5 (23-40) vs 37 (23-40); p = 0.005], PACB patients didn't have more likely classical invasive ductal carcinoma tumor (50% vs 81%; p=0.012), and had high levels of Ki-67 (> 35%) (%69 vs %40; p=0.035). PABC were more likely to be presented as metastatic disease (stage IV) (44% vs 7%; p = <0.001). There was no statistically significant difference in hormone receptors between PABC patients and others (p> 0.05).

In the median 43 months (6-261) follow-up period, 10 (6%) patients developed loco-regional recurrence and 11 (6.5%) patients developed systemic failure. Breast cancer related mortality rate was 9.7% (n=18) among 186 patients. The 5-year loco-regional, disease-free and overall survival rates of the patients were calculated as 94.5%, 87.8% and 88.9%, respectively.

The only independent factor affecting both loco-regional and disease-free survival negatively was non-luminal molecular subtype [(LRFS-HR = 8.68 (1.26-59.92); p = 0.028) and (DFS-HR = 4.31 (1.02-18.16); p = 0.046)].

Among 16 PABC patients, 7 patients were metastatic at presentation and none of these stage IV patients died. Additionally, rest of the patients who are not metastatic developed no recurrence or metastasis.

Conclusion: Although PABC patients present with young age, more aggressive tumors and advanced stage than their non-pregnant peers, survival data does not statistically differ.

Keywords: breast cancer, breast feeding, pregnancy, survival

[PP-019]
PATHOLOGIC COMPLETE RESPONSE RATES (PCR) AFTER NEOADJUVANT CHEMOTHERAPY IN MOLECULAR SUBTYPES OF BREAST CANCER AND FACTORS AFFECTING THESE RATES

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Background: The main advantages of neoadjuvant chemotherapy (NAC) are to pioneer adjuvant treatment regimens, reduce the burden of chemotherapy, and narrow the extent of surgery. Many studies have shown that the response to NACT influences the type of surgery and prognosis. In these studies, it is known that overall survival and disease-free survival rates are better in groups with pathologic complete response (pCR) to NAC

Patients and Methods: n this study, the treatment responses in the primary tumor and axilla lymph nodes of 416 consecutive patients with breast cancer who received NAC between 2022 and 2024 were evaluated. Patients were subdivided into Luminal A (46 patients), Luminal B (136 patients), Her2 positive (149 patients) and Triple Negative (TNBC) (85 patients) according to their molecular subtypes and complete response rates of these subgroups were compared.

Results: In this study group, in which the mean age was 52 years, pCR was achieved in a total of 119 (28.6%) patients. Pathologic complete response rates showed statistically significant differences according to subgroups; while no complete response was observed in the Luminal A group, pCR was observed in 7.4% in the Luminal B group, 52.3% in the Her2 positive group and 36.5% in the TNBC group. ($p<0.01$).

Conclusions: In studies in the literature, pCR rates after NACT vary according to molecular subtypes and have been reported to be between 7-10% in Luminal subtype, 25-60% in Her2 positive subtype and 30-45% in TNBC subtype. When evaluated together with the results of our series, it was thought that it would be more appropriate to plan surgical treatment without waiting for pCR, especially in the Luminal A subtype, after achieving clinical response in the tumor and/or axilla.

Keywords: neoadjuvant, breast cancer, patological complate response

[PP-021]
ELACESTRANT (ELA) VS STANDARD-OF-CARE (SOC) IN ER+/HER2- ADVANCED (ADV) OR METASTATIC BREAST CANCER (MBC) WITH ESR1 MUTATION (ESR1-MUT): KEY BIOMARKERS AND CLINICAL SUBGROUP ANALYSES FROM THE PHASE 3 EMERALD TRIAL

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Objectives: In EMERALD (NCT03778931), patients with >=12 months of prior endocrine therapy (ET)+CDK4/6i achieved a mPFS of 8.6 months with elacestrant vs 1.9 months with SOC (SABCS22). We evaluated patients with ESR1-mut tumors and ET+CDK4/6i >=12 months with bone, liver and/or lung metastases, PIK3CA-mut, TP53-mut, or HER2-low expression.

Methods: Patients with ER+/HER2- mBC who received 1-2 lines of ET+CDK4/6i were randomized 1:1, elacestrant or SOC.

Results: 478 patients were randomized; 228 patients (48%) had ESR1-mutated tumors, and 159 patients (70%) received >=12 months of prior ET+CDK4/6i. Clinically meaningful improvement in PFS for elacestrant vs SOC was consistent across ESR1-mut subgroups.

ER+/HER2-, ESR1-mut patients with prior ET+CDK4/6i >=12 months:

• All ESR1-mut pts
- %(n): 100(159)
- mPFS ELA vs SOC, months(95% CI): 8.61(4.14-10.84) vs 1.91(1.87-3.68)
- HR(95% CI): 0.410(0.262-0.634)

• ESR1-mut+bone mets
- %(n): 86(136)
- mPFS ELA vs SOC, months(95% CI): 9.13(5.49-16.89) vs 1.91(1.87-3.71)
- HR(95% CI): 0.381(0.230-0.623)

[PP-021]

• ESR1-mut+liver and/or lung mets
- %(n): 71(113)
- mPFS ELA vs SOC, months(95% CI): 7.26(2.20-10.84) vs 1.87(1.84-1.94)
- HR(95% CI): 0.354(0.209-0.589)

• ESR1-mut+PIK3CA-mut*
- %(n): 39(62)
- mPFS ELA vs SOC, months(95% CI): 5.45(2.14-10.84) vs 1.94(1.84-3.94)
- HR(95% CI): 0.423(0.176-0.941)

• ESR1-mut+HER2 low expression**
- %(n): 48(77)
- mPFS ELA vs SOC, months(95% CI): 9.03(5.49-16.89) vs 1.87(1.84-3.75)
- HR(95% CI): 0.301(0.142-0.604)

• ESR1-mut+TP53-mut
- %(n): 38(61)
- mPFS ELA, months(95% CI): 8.61(3.65-24.25) vs 1.87(1.84-3.52)
- HR(95% CI): 0.300(0.132-0.643)

*Includes E545K/H1047R/E542K amongst others; **HER2 IHC1+/2+ without ISH amplification. Data not available for all patients

Conclusions: These results demonstrate that when ESR1-mut tumors remain endocrine sensitive, the ER pathway could be the main driver of disease despite other resistance mechanisms and/or metastatic site, coexisting mutations, or HER2-low expression. Single-agent elacestrant enables ET sequencing in the second line before other targeted therapies, drug combinations, and chemo-based regimens, including antibody-drug conjugates.

Keywords: Elacestrant, ESR1, EMERALD, CDK4/6, endocrine therapy

[PP-023]
PRIMARY BREAST SARCOMAS: EXPERIENCE OF THE MEDICAL ONCOLOGY DEPARTMENT AT THE HASSAN II UNIVERSITY HOSPITAL IN FEZ

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Introduction: Breast sarcomas are rare tumours, they represent 1% of all breast cancers. Their treatment is based on surgery, while radiotherapy and chemotherapy remain controversial. These tumors have poor prognosis.

Material and Methods: Our work is a retrospective study conducted on 12 cases of breast sarcoma collected in the department of oncology during a period of 13 years.

Results: The breast sarcoma predominates among women with an average age of 45.5 years with extremes of 30 to 72 years.

Clinically, there are no specific signs that allow the diagnosis to be oriented (increased breast volume was the main sign, with an average size of the nodule of 9.5cm).

Imaging is based on mammography, breast ultrasound and breast MRI. Only the anatomopathological examination can establish the diagnosis with certainty and makes it possible to specify the histological type and this with the help of the IHC.

All our patients underwent microbiopsy and all were found to be high-grade phyllodes.

Regarding treatment, 33% of patients underwent initial surgery, in our series the mastectomy was the reference procedure.

All patients received neoadjuvant chemotherapy, mainly with the AC60 protocol, which was well tolerated by most. Side effects included vomiting in 4 patients, hematological toxicity in 2, and taxane-related neuropathy in 2. Approximately 66,66% of patients received adjuvant chemotherapy.

Additional therapeutic radiotherapy was systematic, and palliative chemotherapy was used for patients who have developed metastasis For the evolution at 5 years, we note 25% of metastases, mainly pulmonary, and the 5-year survival for our patients is 75%

Conclusion: Breast sarcomas are rare and aggressive tumors and poor prognosis, the management must be discussed in RCP to propose adequate treatement.

Keywords: phyllode sarcoma, chemotherapy, radiotherapy

[PP-024]
CONFRONTING BREAST ANGIOSARCOMA RECURRENCE: INSIGHTS FROM A JOURNEY THROUGH THREE EPISODES

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Introduction: Primary breast angiosarcoma is an extremely rare tumor, difficult to diagnose, and associated with a poor prognosis.

This case report discusses a patient diagnosed with recurrent breast angiosarcoma following the treatment of primary breast angiosarcoma.

Case Report: A 41-year-old woman with a history of primary angiosarcoma of the left breast, treated by left mastectomy and radio-chemotherapy in 2020, presented with a lesion on her right breast that had been progressively enlarging over the past two months. Histological examination of the biopsy revealed angiosarcoma with cutaneous metastases on the outer aspect of the arm. The patient initially underwent right mastectomy followed by excision of the tumor mass on her right arm. She was lost to follow-up after March 2023.

She then presented in June 2023 for a second recurrence of her angiosarcoma without metastases at the level of the middle slope of the left mastectomy site for which she benefited from an excision of the nodule whose anatomopathological study was compatible with a recurrence of her angiosarcoma.

In October 2023, the patient presented with a third locoregional recurrence at the left mastectomy site, again without metastases. She underwent surgery of the mastectomy nodule and was started on weekly paclitaxel chemotherapy for seven cycles. The patient is still receiving chemotherapy with good tolerance, a good clinical and radiological response, under close monitoring.

Conclusion: Breast angiosarcoma is a rare malignant tumor, more challenging to detect and treat than other types of breast cancer. Patients with a history of radiotherapy have an increased risk of developing secondary breast angiosarcoma, which may present as isolated cutaneous changes that might not be detected by mammography.

Keywords: Angiosarcoma, recurrence, three episodes

[PP-027]
METAPLASTIC BREAST CARCINOMA HAS A WORSE PROGNOSIS THAN TRIPLE NEGATIVE BREAST CANCER

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Objectives: Metaplastic breast carcinoma (MBC) and triple-negative subtype invasive ductal carcinoma (IDC) are aggressive subtypes associated with poorer outcomes compared to other breast cancer subtypes. We aimed to compare the clinical characteristics and outcomes of MBC and IDC and review the literature published.

Methods: This is a retrospective, single-center study focusing on immunohistochemically triple-negative breast cancer patients, categorized into two groups as metaplastic carcinoma and invasive ductal carcinoma. Demographic, clinico-pathologic, and treatment characteristics were evaluated and survival analysis were compared.

Results: The study included 115 triple-negative breast cancer patients, with 13 classified were metaplastic carcinoma and 102 invasive ductal carcinomas. Median age was 53 years. Significant differences were observed between two groups in terms of perineural invasion (MBC: 23% vs IDC: 3.9 %) and histological grade (MBC: 100% vs IDC: 71.3%).
After a median follow-up of 62 months, local breast recurrence occurred in 2.6% of patients, axillary recurrence in 1.7%, and systemic recurrence in 12.2%. Breast cancer-related mortality rate was 8.7% (n=10). Disease-free survival (DFS); (MBC: 87% vs IDC: 71.2%, p=0.193) and disease-specific survivals (DSS) rates were worse in patients with MBC; (MBC: 69.3% vs IDC: 90.7%, p=0.045) compared to those with triple-negative invasive ductal carcinoma. Tumors larger than 2 cm had significant worse DFS (79.6% vs 95.6%, p=0.017) and DSS (82.3% vs 96.6%, p=0.029) compared to smaller tumors. Tumors with angio-lymphatic invasion had statistically significantly lower DFS compared to those without invasion (73.3% vs 90.2%, p=0.035).
In multivariate analysis metaplastic subtype was identified as the only independent factor affecting DSS (HR:3.6, 95% CI:1.02-12.76, p=0.047).

Conclusion: Patients with MBC exhibited aggressive tumor biology and lower survival rates and poorer prognosis compared to IDC. The study suggests tailored treatment approaches for MBC-specific features may improve patient outcomes and quality of life. Further investigation into targeted therapies for MBCs is recommended.

Keywords: Metaplastic breast cancer (MBC), Triple-negative invasive ductal cancer (TN-IDC), disease specific survival (DSS), disease free survival (DFS)

[PP-029]
INVASIVE LOBULAR CARCINOMA OF THE BREAST: EPIDEMIOLOGICAL, CLINICAL, THERAPEUTIC AND EVOLUTIONARY PARTICULARITIES

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Introduction: Lobular carcinoma, though rare, is a form of breast cancer that requires special attention. This retrospective study analyzes 37 cases of invasive lobular carcinoma of the breast treated over a 7-year period at the Hassan II University Hospital in Fes.

Materials and Methods: This retrospective study included 37 cases of ILC over 6 years at CHU Hassan II, Fes. All patients diagnosed with ILC during this period were included.

Results: The median age of the patients was 55.27 years, with 21.6% on oral contraceptives and 67.7% postmenopausal. The average consultation delay was 5 months, and the main symptom was a breast nodule found in 81.1% of the patients. Ultrasound-mammography revealed lesions mainly classified as ACR5 in 62.2% of cases, and breast MRI was used in 10.8% of the patients.

Histopathological analysis after core needle biopsy revealed ILC with lymph node involvement in 43.2%, capsular rupture in 18.9%, and vascular emboli in 21.6%. Most tumors were grade II according to the Scarff-Bloom-Richardson (SBR) system, with 94.6% of patients expressing hormone receptors and 29.7% weakly expressing HER2 receptors. The tumor was often classified as T2 (70.3%), N0 (59.5%), and metastatic M1 (16.2%).

Regarding treatment, 35% of patients underwent initial surgery, and 35% received neoadjuvant chemotherapy, mainly with the AC60 + taxane protocol, which was well tolerated by most. Side effects included vomiting in 10 patients, hematological toxicity in 4, and taxane-related neuropathy in 2. Approximately 28.75% of patients received adjuvant chemotherapy, and 26.85% received radiotherapy. 16.2% of patients were followed by a genomic test Oncotype DX, and 94.6% received hormone therapy, mainly tamoxifen.

The median follow-up was 40 months, with a 5-year overall survival rate of 91.89%.

Conclusion: In conclusion, the diagnosis of invasive lobular carcinoma remains complex, but its treatment does not differ from that of invasive ductal carcinoma.

Keywords: Chemotherapy, Lobular breast cancer, Hormonal receptors

[PP-033]
TOXICITY OF NEOADJUVANT CHEMOTHERAPY IN ELDERLY BREAST CANCER PATIENTS: A RETROSPECTIVE STUDY

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Background: Neoadjuvant chemotherapy (NAC) is a standard treatment for breast cancer, aimed at reducing tumor size before surgery. However, elderly patients (>=70 years) are often underrepresented in clinical trials, leading to limited data on the specific toxicities they may experience during NAC. This study aims to evaluate the toxicities associated with NAC in elderly breast cancer patients.

Methods: We conducted a retrospective analysis of 27 female patients aged 70 or older who received NAC for breast cancer at the Department of Medical Oncology, CHU Hassan II, Fes, Morocco, between January 2020 and December 2023. Patient data, including demographic characteristics, treatment regimens, and toxicity profiles, were collected and analyzed. Toxicities were graded according to the Common Terminology Criteria for Adverse Events (CTCAE) version 5.0.

Results: The median age of the cohort was 75 years (range: 70-82). Histological types included 25 patients with invasive ductal carcinoma and 2 with invasive lobular carcinoma. Molecular profiles were 11 patients with ER-positive, HER2-negative, 5 with HER2-positive, and 11 with triple-negative breast cancer. Performance status was OMS 0-1 in 20 patients and OMS >= 2 in 5 patients. The G8 score was >= 14 in 7 patients (38.89%) and < 14 in 11 patients (61.11%).

Common toxicities included nausea (64.29%), vomiting (39.29%), diarrhea (7.14%), neutropenia (50%), febrile neutropenia (3.57%), anemia (25%), thrombocytopenia (7.14%), peripheral neuropathy (32.14%), hypersensitivity reactions (7.14%), mucositis (28.57%), fatigue (67.86%), and anorexia (35.71%). Grade 3 or higher toxicities occurred in 42.31% of patients. Treatment delays were required in 64.29% of cases, dose reductions in 17.86%, and treatment cessation in 3.57%. Among the 23 patients who underwent surgery, 25% achieved a complete pathological response (pCR).

Conclusions: Elderly breast cancer patients undergoing NAC experience significant toxicities, highlighting the need for careful monitoring and potentially modified treatment regimens.

Keywords: elderly, breast cancer, NAC

[PP-036]
MALE BREAST CANCER: CLINICAL, HISTOLOGICAL, PROGNOSTIC AND THERAPEUTIC ASPECTS EXPERIENCE OF THE MEDICAL ONCOLOGY DEPARTMENT AT HASSAN II UNIVERSITY HOSPITAL, FEZ

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Introduction: Male breast cancer is a rare condition, accounting for around 1% of all breast cancers and less than 1% of all male neoplasia. The particularity of male breast cancer is that its prognosis is often poorer than in women, due to its late discovery and therefore at a more advanced stage.

Objective: The aim of this study was to analyze the circumstances of discovery, histological features, therapeutic modalities and prognostic factors.

Material-Method: A retrospective study was conducted at the medical oncology department of the Hassan II University Hospital in Fez, covering a 5-year period from January 2019 to December 2023, enrolling 13 patients with breast cancer, regardless of histological subtype.

Results: Male breast cancer represents 1% of all cancers managed in our department.
The median age of our patients was 71 years [42 - 92 years].
In 84.61% of cases, the disease revealed itself as a palpable breast mass, associated with inflammatory signs in 15.83%.
The predominant histological type was invasive ductal carcinoma in 92.30% of cases.
Estrogen and progesterone hormone receptors were positive in 100% and 92.30% of cases respectively.
46.15% of patients were metastatic and 53.58% had localized disease.
The most frequent metastatic site was the lung (38.46%), followed by bone and lymph node metastases.
53.83% of patients were treated by simple mastectomy combined with homolateral lymph node dissection, 38.46% received adjuvant chemotherapy, 23.07% postoperative radiotherapy and 15% hormone therapy.
In all patients studied, we noted one complete remission, one partial response, 3 stability, one death, 5 patients lost to follow-up and 2 progression.

Conclusion: The management of breast cancer in men is identical to that of women, and their prognosis is the same at the same stage. The particularity of male breast cancer is that it is discovered at a late stage.

Keywords: Male breast cancer, clinical, histological, prognostic and therapeutic aspects

[PP-039]
TRIPLE-NEGATIVE BREAST CANCER: CURRENT SITUATION

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Introduction: Breast cancer is a heterogeneous disease. Triple-negative breast cancer (TNBC) is defined by the absence of estrogen receptor (ER), progesterone receptor (PR), and HER2 expression, and is known for its aggressiveness.

Materials and Methods: This retrospective study includes a series of 75 cases collected in the medical oncology department at CHU Hassan II in Fès from January 2020 to December 2023, out of a total of 380 localized TNBC cases.

Results: A frequency peak was noted between ages 31 and 42, with 42.7% of patients still in reproductive age. Invasive ductal carcinoma was the predominant type, accounting for 100% of cases, with an average tumor size of 4.4 cm. Histopathological grades II and III were observed in 38.6% and 58.6% of cases, respectively.

Primary surgical intervention was performed in 22.6% of patients (17 cases), while 74.6% (56 patients) underwent surgery post-chemotherapy. Neoadjuvant chemotherapy was administered to 77.3% (58 cases), with 23.33% receiving a dose-dense regimen and 76.67% receiving conventional chemotherapy. Adjuvant systemic chemotherapy was administered in 60% of cases, with 10.4% on a dose-dense regimen and 89.6% on a conventional regimen.

An unfavorable progression was noted in 28.97% of cases, with 23.18% (16 cases) developing systemic metastases predominantly in bone (37.5%), lungs (31.25%), brain (18.75%), and liver (12.5%). Hematologic toxicity was the main side effect observed, accounting for 44.06% of the chemotherapy-related toxicity in our study. Adjuvant external radiotherapy at a dose of 42 Gray in 16 sessions (2.8 Gray per session) was administered in 82.6% of treated cases (62 patients).

Conclusion: Triple-negative breast cancer is a subtype of breast cancer characterized by clinical, prognostic, and therapeutic polymorphism.

Keywords: TNC, Chemotherapy, Breast cancer

[PP-042]
ASSESSING MAMMAGLOBIN-A AS A PROGNOSTIC MARKER IN BREAST CANCER TISSUE AND PERITUMORAL REGIONS

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Background: Human mammaglobin-A is a critical marker for the hematogenous spread of breast cancer. This study highlights the significance of peritumoral tissue as an integral component in the tumorigenesis process, and explores the prognostic importance of mammaglobin-A levels in this tissue.

Methods: The study involved 64 female patients diagnosed with primary breast cancer, monitored over a five-year period. The concentration of mammaglobin-A was measured in samples of tumor and peritumoral tissues using Enzyme-linked Immunosorbent Assay (ELISA), while its gene expression was quantified through quantitative reverse transcription-polymerase chain reaction (qRT-PCR).

Results: Elevated levels of mammaglobin-A were observed in both tumor and peritumoral tissues, correlating with increases in tumor size, number of affected lymph nodes, and presence of metastases. Notably, mammaglobin-A expression was significantly higher in tumor tissue compared to peritumoral tissue across various tumor characteristics and types. Interestingly, mammaglobin-A concentrations were greater in peritumoral tissue than in invasive ductal cancer tissue, whereas lobular cancer showed higher levels within the tumor tissue itself.

Conclusion: Threshold levels of mammaglobin-A concentration and gene expression have been identified, which may predict increased metastatic risk. These findings suggest that patients exceeding these thresholds could benefit from early intensive adjuvant therapy.

Keywords: Breast cancer, mammaglobin-A, tumor invasiveness, metastasis, prognosis

[PP-043]
PREDICTION OF OVARIAN FUNCTION AFTER BREAST CANCER TREATMENT BY A MODEL INVOLVING PRE-TREATMENT AMH LEVELS

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Objectives: Treatment of breast cancer (BC) can cause a decrease in ovarian reserve and induce infertility; thus, various methods of fertility preservation are used before the initiation of therapies in premenopausal patients. However, this could be an unnecessary procedure in patients that would not experience post-treatment decline in fertility capacity. Anti-müllerian hormone (AMH) is one of the best markers of ovarian reserve, and previous studies have shown that pre- and post- treatment AMH levels are directly associated. We carried out this study to define a cut-off point for pre-treatment AMH (AMH0) and other factors that could predict an appropriate level of AMH two years after BC treatment (AMH2). Materials-Methods: In this multicentric prospective cohort study, non-metastatic BC patients under 45 years of age were recruited at diagnosis, before BC treatment. AMH0 and AMH2 as well as hormonal and non-hormonal patient characteristics were recorded. ROC Curve analysis, Decision Tree and Random Forest analyses were used to find an AMH0 cutoff level that would predict adequate AMH2 levels, and also design a model involving other patient features that could be used to prognosticate acceptable levels of AMH2. Results: Overall, 84 patients were entered in the analysis. According to ROC curve analysis, AMH0 >3 ng/ml (AUC=0.69, 95%CI:0.54-0.84) could predict an AMH2 >= 0.7 with a sensitivity of 79% and a specificity of =60%. Decision tree and Random Forest analyses revealed that the best model for predicting an AMH2 above 0.7 was the combination of AMH0 >3.3, menarche age <14, and age <31 (probability=93%).

Conclusions: Fertility preservation before the treatment of BC can be withheld in patients in their twenties and early thirties who have an AMH0 above 3; especially in those who had their menarche at a young age. Performing larger studies are suggested to test this model further.

Keywords: Anti-Mullerian Hormone, breast neoplasm, cut-off point, infertility, prediction model

[PP-044]
DEVELOPMENT AND EVALUATION OF AN ONLINE CURRICULUM FOR BREAST CANCER GENETIC TESTING & COUNSELLING FOR NIGERIAN HEALTHCARE PROVIDERS

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Objective: Continued medical education is vital for cancer control in low resource settings. A recent survey of healthcare providers (HCPs) in Nigeria identified a lack of knowledge as a barrier to offering genetic testing to patients. In response, we developed a course aimed at improving breast cancer genetics education for Nigerian HCPs.

Methods: A multidisciplinary team comprised of genetic counsellors, surgical oncologists, a gynaecologist, and education experts from West Africa and North America, virtually convened to develop a curriculum that meets the demands of non-genetics oncology-based HCPs. The 4-module design focused on Epidemiology, Hereditary Breast Cancer Principles, Communicating Genetic Test Results, and Clinical Management and featured interactive videos, printable workbooks, assessment strategies, and supplementary resources. The e-learning curriculum was hosted on a Moodle-based platform, promoting interactive, self-paced learning to different cadres of Nigerian HCP trainees.

Results: Over one month, 39 HCPs completed the curriculum online. Feedback was provided by 26 trainees using a Likert-scale survey. Most trainees expressed high satisfaction, with 81% strongly affirming that the curriculum achieved its objectives and 85% praising the clarity and effectiveness. Cases that illustrated real-world context and cultural suitability were well-received, with over 65% strong agreement in both categories. The inclusion of multimedia materials was considered beneficial by 73% of respondents. Online learning effectiveness had a combined positive response of over 96% and the course platform was seen as conducive to learning, although strong agreement was less predominant (42%). Module duration and suitability of knowledge assessments were noted by approximately 12% as aspects needing improvement.

Conclusion: The e-learning course was well received and deemed effective by HCP trainees throughout Nigeria. Recommendations for future iterations should include hybrid learning models and expansion to more breast cancer risk genes. This collaboration offers a scalable training model, serving as a blueprint for other low-resource settings.

Keywords: e-learning, Breast Cancer, Genetic testing, Healthcare providers, Nigeria

[PP-045]
ASSOCIATION OF DEPRESSION AND ANXIETY WITH THE EXPRESSION OF NEUROKININ RECEPTORS IN WOMEN SUFFERED FROM BREAST CARCINOMA

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Objective: Breast cancer (BC) remains a pressing global problem, both in terms of incidence and mortality. In recent years, efforts have been made to define new molecular and signaling pathways involved in the pathogenesis of BC, in order to obtain a more complete and clearer picture in terms of predicting the prognosis and the effectiveness of the applied therapy.

The aim of this research is to examine the relationship between anxiety and depression with the expression of neurokinin receptors (NKR) in breast cancer, as well as their possible relationship with clinical, pathohistological, and immunophenotypic characteristics of the tumor.

Material-Methods: The research involved filling out questionnaires for self-assessment of depression/anxiety of the affected women, as well as a complete pathohistological analysis of the 93 patient's tissue material. All significant morphological parameters of BC were defined on the standard stained preparations. Immunohistochemically, tissue expression of relevant markers was determined using antibodies (NKR, ER, PR, HER2, Ki67, and caspase-3). Two groups of women were defined, with and without a present depressive/anxiety disorder, as well as existing differences in terms of clinical and histopathological characteristics.

Results: Among the examined women, a significant number of those with a certain degree of depression/anxiety were found. The expression of NKR was positively correlated with a significant degree of depression and with the expression of significant predictors of cancer behavior such as the ER, HER2, proliferative index marker Ki67, as well as the apoptosis marker caspase-3.

Conclusion: It has been unequivocally shown that the comorbidity of BC and depression is significant from a clinical point of view, that there are interwoven molecular mechanisms, the more detailed understanding of which would help in the field of discovering new therapeutic procedures that would act in a targeted manner in preventing tumor growth and invasion.

Keywords: breast cancer, depression, anxiety, carcinogenesis, neurokinin receptor

[PP-046]
EVALUATION OF BRCA1 AND BRCA2 GENE MUTATIONS IN BREAST CANCER PATIENTS

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Objective: Breast cancer is the most common type of cancer in women and has the highest mortality rate. Tumor suppressor genes, oncogenes and DNA repair genes play a role in the genetic etiopathogenesis of breast cancer. BRCA1 and BRCA2 genes, from the tumor suppressor gene family, are the genes with the most mutations detected in breast cancer. This study aims to present the results of BRCA1 and BRCA2 gene analysis studied in patients diagnosed with breast cancer at Harran University General Surgery outpatient clinic.

Materials-Methods: A total of 272 breast cancer patients were included in this study. BRCA1 and BRCA2 gene variations were identified by next-generation DNA sequence analysis.

Results: In our study, 6.6% of the patients were men and 93.4% were women. Genetic variations in the BRCA1 and BRCA2 genes was detected in 4% and 9.2% of all patients, respectively. Pathogenic mutation in the BRCA1 gene was detected in 9 patients and VUS in 2 patients. A total of 177 polymorphisms were observed in 57 patients. In the BRCA2 gene, pathogenic mutation was detected in 20 patients and VUS in 5 patients. A total of 141 polymorphisms were observed in 80 patients.

Conclusions: The incidence of BRCA1 and BRCA2 gene mutations is quite high in our region and, interestingly, BRCA2 mutations are more common. Therefore, genetic screening of patients and families diagnosed with breast cancer is important.

Keywords: Breast cancer, BRCA1, BRCA2, gene mutations

[PP-048]
BIBLIOMETRIC ANALYSIS BASED ON WEB OF SCIENCE DATABASE CONSISTING OF 930 ARTICLES RELATED TO ONCOPLASTIC BREAST SURGERY PUBLISHED BETWEEN 2000 AND 2023

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Objective: The desire to have knowledge on oncoplastic breast surgery (OBS) has accelerated with the increasing popularity of OBS among surgeons in recent years. Bibliometrics is the holistic analysis of scientific publications or documents. In this study, we aimed to use bibliometric analyses to determine how articles about OBS, published between the years 2000-2023, have progressed according to the Web of Science database, and to identify future trends necessary to contribute to the scientific literature.

Materials-Methods: The research data was sourced from the search engine of Thomson Reuters®, Web of Science Core Collection, by using the keyword "Oncoplastic Breast Surgery", and by choosing the "Topic" section on October 19, 2023. Only "Articles" in "English" were included in the study protocol. The publication number, rates, citation, and h-index data were evaluated according to years, countries, journal categories, organizations, and authors. In addition, publication metrics were evaluated in terms of Gross Domestic Product (GDP), Gross Domestic Product per capita (GDPpp), and Human Development Index (HDI) of the countries.

Results: Since 2000, 1469 publications have been published on OBS. Only articles in English (n=930) were assessed. H-index of the 930 articles in English was 50. In the analysis of citation numbers, it was seen that the articles focusing on OBS were cited 12930 times (including self-citations). The most productive countries, scientific journals, and authors are United States of America, Breast, and Losken A, respectively. There was a positive correlation between the number of publications and GDP (r=0.848, p=0.002) as well as between the number of publications and GDPpp (r=0.726, p=0.018).

Conclusions: Rapid growth in the publication productivity indexed on OBS means that the field is receiving more and more attention from researchers. This advancement emphasizes the benefits of bibliometric analysis, which is helpful to researchers in providing directions for future studies.

Keywords: Article, bibliometrics, breast cancer, oncoplastic breast surgery

[PP-051]
DEVELOPMENT AND ESTABLISHMENT OF THE IDIOPATHIC GRANULOMATOUS MASTITIS REGISTRY AND REVIEW OF THE FIRST 300 PATIENTS

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Objectives: Idiopathic granulomatous mastitis (IGM) is a rare breast disease worldwide, more common in the middle east. The etiology and best management strategy are unknown because studies involve retrospectively collected data or small sample sizes. The objective of this IGM registry is to systematically record data of a large cohort of IGM patients across an extended geographical area for methodical evaluation of underlying causes, course, and management outcomes; and designation of personalized disease treatments.

Materials-Methods: A comprehensive search of the literature was conducted to list all the mentioned variables. Then, the minimal requirements that would cover the registry objectives were discussed in expert meetings. The minimum dataset was defined and the software was designed accordingly. The registry is in English and includes retrospective and prospective data. The target accrual is unlimited and the study duration will be five years, with a two-year follow up; time limits are extendable. Data entry and subsequent quality control is done by trained medical staff, and a second random quality check is completed by project authorities.

Results: The minimum dataset includes 16 titles and subtitles and 280 dependent and independent questions. Agreements are being signed with collaborators from several medical centers in both the private and public sectors in Iran, and data are being entered. Up to now, data of 300 patients including both previous and new cases has been entered and checked. An overview of the data is given in the presentation.

Conclusions: The IGM registry is growing nationally and is collecting precise data that will be used for clarification of unknown topics about the disease. Foreign collaboration in the registry through mutual agreements could extend the scope of usability and the accuracy of results. Also, future cooperation with other IGM registries is considered as a main goal of the present project.

Keywords: cohort, database, granulomatous mastitis, minimum dataset, quality control

[PP-052]
USE OF MOBILE DEVICES FOR MEDICAL VISUAL DOCUMENTATION IN BREAST HEALTH

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Medical visual documentation is the term of medical photography and medical videography in medicine. The basis is academically effective and high-quality visual documents. In breast health, medical visual documentation is also very important in every steps. During obtaining the medical visual documents, the philosophy of "The camera you always carry with you is always the best", has become the point of view in recent time. It is sometimes impossible for physician to walk around with a fully equipped camera at all times. It is often impossible to use high-end cameras for patient photography in intensive outpatient clinics. In surgical practice, it is an extra challenge to reach professional cameras and equipment to take medical documents.

We would like to say that mobile devices are indispensable in many respects in the field of Medical Visual Documentation and the best usable device by taking into account all factors, considering the imaging quality and practical use of the camera, which has many professional features with today's technology and superior features. In the light of technological development over the years, we have tried the use of different models of mobile devices in Medical Visual Documentation in breast health. When compared with many different models of cameras, lenses and equipment at the professional level, the photographic results obtained by mobile devices are similar and sometimes even superior in terms of ease of use, portability and practicality. Also, by using mobile devices in breast health we found out more datas and documents might be recorded other than photographic devices. With the smart learning and computer learning features added to the camera technologies of mobile devices in recent years, the environment and subject features are recognized by the device, and much higher quality images are obtained much faster and without imposing an extra workload on the user.

Keywords: breast health, medical visual documentation, mobile devices

[PP-053]
MEDICAL VISUAL DOCUMENTATION IN BREAST HEALTH PRACTICE IN TÜRKIYE

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Medical visual documentation (MVD) is the term of medical photography and medical videography in medicine. The basis is academically effective and high-quality visual documents. In breast health, as in all other medical branches, MVD has a major role in education and patient follow-up.

Since 2013 in Türkiye, we were practicing educations both hands-on and theoratical for the doctors and medical staffs as Kocaeli University Faculty of Medicine Medical Visual Documentation Unit. After 10 years of education past, we planned to review the results of those educations in the field of breast health. We prepared an electronic survey according to the MVD educations and practice of MVD in breast health. We planned a study universe of all surgeons dealing with breast health including general surgeons and plastic surgeons. Over the mailing records and databases of Turkish Surgical Association we reached over 9000 members and of Turkish Plastic Reconstructive and Aesthetic Surgery Association we reached over 1000 members. Specialized 157 general surgeons and 33 plastic surgeons who are dealing with breast health and answered the survey were included the study. As our results, we found that 122 surgeons dealing with breast health is using MVD in their breast health practice. Most of the them are using clinical, intra-operative and specimen photography; most of them are documenting only the specific cases, not all cases; most of them are using mobile devices instead of professional cameras; most of them are not using specific studios, lightning or equipments; most of them are not taking specific MVD consent forms; and most of them are not using specific and secure archiving techniques. We devided the group as educated in MVD and not. MVD education in breast health is found as statistically effective in the basis of obtaining academically effective and high-quality visual documents (p=0.048).

Keywords: breast health, medical visual documentation, education

[PP-054]
USE OF MOBILE DEVICE PHOTOGRAHY APPLICATION IN BREAST HEALTH

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Medical visual documentation (MVD) is used in every field of medicine. Standards have been proposed to obtain better quality and academically effective medical photographs in breast health. The uploading of medical photographs taken within the framework of these standards to secure servers or their integration into breast recording systems is also of great importance. Our aim is to use the mobile application prepared for the secure integration of medical photographs taken in accordance with the recommended standards to the breast health registration database and to be stored with a special encryption. We developed a mobile application, which automatically transfers the photographs of patients to the breast health registration database. When the mobile application is opened, the patient's ID number, name-surname, date of photographs and photograph set is asked. After this information is entered, the system allows shooting with reminder icons from 5 different angles, arms at waist, and 5 different angles, arms on the head. Afterwards, the application combines the 10 photographs and perform a combined photograph and sends it for saving it to the same patient's file in the breast health registration database. Medical photographs taken with this application are instantly uploaded to the breast health registration database, and there is no need to spend an additional time or extra force. Normally, medical photographs taken with a mobile phone or camera are first transferred to the computer and then transferred to the breast cancer registration databases via a computer browser. This takes time and causes negative consequences such as data loss in busy work pace. With the mobile application, MVD is transferred to the system with a secure encryption method as soon as they are taken. It reduces the workload of the physician and ensures that more quality MVD can be collected securely in patient tracking systems.

Keywords: breast health, medical visual documentation, mobile application

[PP-055]
ENHANCING BREAST CANCER KNOWLEDGE AMONG HEALTHCARE PROFESSIONALS: A PRE- AND POST-INTERVENTION STUDY USING KNOWLEDGE-BASED EDUCATION

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Introduction: Mitigating breast cancer-related morbidity and mortality hinges on adherence to globally recognized management guidelines and educating healthcare professionals with the relevant knowledge. This study examined the effectiveness of educational sessions for healthcare professionals in enhancing their knowledge of early breast cancer detection, focusing specifically on breast cancer screening to improved patients' outcomes.

Method : A study was conducted with a cohort of over 110 healthcare professionals which included, nurses and allied health professionals. The intervention comprised of a webinar session on the education of breast cancer risk factors and screening guidelines. Participants' knowledge regarding breast cancer factors, clinical presentation, and screening were evaluated using a structured questionnaire administered before and after the educational session. Data was analysed using an independent samples t-test (SPSS version 26) to assess the differences in knowledge scores between pre- and post-session assessments, with statistical significance set at a p-value < 0.05.

Results: Significant improvements were observed in most domains of breast cancer knowledge assessments based on the pre- and post-session responses. Following the educational session, participants' knowledge demonstrated a statistically significant improvement with a mean score increase from 90% to 96% ($p < 0.05$). These results underscore the efficacy of the educational intervention in bolstering healthcare professionals' understanding of breast cancer-related concepts and screening guidelines.

Conclusion: This study highlights the effectiveness of an educational approach in augmenting healthcare professionals' awareness and comprehension of breast cancer risk factors, screening, and management protocols.

Keywords: Breast cancer, education, healthcare professionals, screening

[PP-056]
HOW TO RECORD THE MANIFESTATIONS AND CLINICAL COURSE OF IDIOPATHIC GRANULOMATOUS MASTITIS? PRESENTATION OF AN ORGANIZED FORMAT

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Objectives: Idiopathic granulomatous mastitis (IGM) is a benign, potentially recurrent breast disease. Signs in one patient can be very diverse and in different stages; making documentation of findings and disease course extremely difficult. Research on IGM also remains imprecise without an accurate method of data record. We carried out this study to design a form dedicated to the documentation of clinical findings and course of IGM. Materials-Methods: A form previously designed for our national IGM trial (yet unpublished) was considered as the base. Two expert groups reviewed it for missing and unnecessary parts, and revised the form accordingly in three steps. In each step, the new form was assessed by the other group in their breast clinic, and revised again. The final form was evaluated by other specialists on their IGM patients. The last modifications yielded the present format. A user guide was also developed. Results: The final form is in English and consists of three sheets. a) The First Visit Page allows documentation of exam findings and sites of aspiration and intralesional injections by drawing symbols on breast diagrams, marking lesions' features and accompanying signs and symptoms in tables, recording the patient history, lab and imaging results and the management plan in provided spaces, and scoring the breast deformity. b) The Next Visits Page is the same but for tables delineating clinical changes and new paraclinical investigations. c) The Treatment Summary Page includes only two tables for recording treatment dates and details including medicines and procedures. Conclusions: We developed a form for documentation of the clinical findings and course of IGM in a standard uniform format. If used by clinicians who manage IGM patients, this will not only allow detailed follow up of patients, but also facilitate international collaborative research due to uniform documentation of clinical data.

Keywords: breast diagram, breast exam, data record, granulomatous mastitis, signs and symptoms

[PP-057]
EVALUATION OF THE EFFECT OF METFORMIN ON FIBROCYSTIC DISEASE OF THE BREAST

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Objectives: Fibrocystic disease (FCD) of the breast is very common and can be troublesome regarding the incidence of unnecessary breast biopsy and surgery, confusion with more important breast problems including cancer, and patients' symptoms and anxiety. It has no effective recognized management approach. FCD is estrogen-dependent, and has proliferative features in histology. Considering the known anti-proliferative characteristics of metformin and its effects against estrogen, we carried out a study to assess the response of FCD to this medicine. Materials-Methods: Inclusion criteria were premenopausal status, diagnosis of FCD based on history and ultrasound, the presence of measurable clusters of microcyst on ultrasound, with or without biopsy results. Overall, 154 participants were randomly assigned to the metformin (n=77) or the placebo (n=77) group. The former used 500 mg metformin, and the latter placebo, twice daily. Measured variables consisted of the number and size of the clusters, and the patients' pain as scored by the visual analog scale. Results: Overall, size and number of microcyst clusters lessened more in the metformin group, but the difference was not statistically significant (p= 0.310 and p= 0.637, respectively). However, clusters that were 15 mm or more in size got significantly smaller in the metformin than the placebo group (p= 0.011). Mastalgia improvement was also seen significantly more in the metformin than placebo group (p= 0.031). Conclusions: Our study showed improvements in breast pain and size of the larger clusters of microcyst with metformin use. The dose of metformin was only 1000 mg daily while doses as high as 1500 or 2000 mg have been used for other disorders. Thus, we propose that larger studies with higher doses of metformin be carried out to further investigate this finding.

Keywords: antiglycemic agent, cyst, placebo, randomized clinical trial, ultrasound

[PP-058]
WHAT ARE THE QUESTIONS OF HEALTHY WOMEN ABOUT BREAST CANCER? ORGANIZATION OF A TOPIC LIST ON THEIR OWN PERSPECTIVE

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Objectives: In the absence of an organized breast cancer (BC) screening program, early diagnosis of BC is achievable when women seek medical attention at the earliest presentation, or before it. This attitude necessitates an appropriate understanding of disease risks and manifestations, the inconveniences of late diagnosis, and the measures that should be taken for on-time BC management. Many educational programs are being held worldwide to address these issues by using various methods in different settings. Most of them are planned and organized by health managers, experts of public health, or medical staff and doctors. Nevertheless, women might have unanswered questions, and their needs may remain unaddressed when they are not inquired for. Therefore, we carried out this study to find out the information needs of healthy women about BC as described by themselves. Materials-Methods: We used the maximum variation sampling, and theoretical saturation to reach sample saturation. Our study population consisted of women attending clinics other than the Breast Clinic at a women's hospital during a two-month interval. Participants with no breast disease were asked to write down their questions and the BC topics that they wanted to be addressed in educational programs. New participants were included until no new question was found in the notes. Then all topics and questions were matched and organized based on their subjects. Results: The list of topics that resulted from this study consisted of 63 questions in 5 categories, mentioned by 60 participants overall. The list will be displayed in the presentation. Conclusions: BC education has been addressed in many studies, however the perspective of the target group has scarcely been considered. Our study involves healthy women and assesses their BC educational needs; and yields a list of topics that should be considered when planning an educational program.

Keywords: breast neoplasm, education, maximum variation sampling, need assessment

[PP-059]
REPORT OF THE TREATMENT OF TWO CASES OF REFRACTORY IDIOPATHIC GRANULOMATOUS MASTITIS WITH IMIQUIMOD

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Objectives: Idiopathic granulomatous mastitis (IGM) is a rare benign chronic breast inflammatory disease. Immunological pathogenesis is strongly suggested as the cause. Management of IGM remains controversial and treatment of resistant cases constitutes a great challenge. Imiquimod is a topical immunomodulator agent that is used in the treatment of several immune-related diseases. Therefore, in this study, we examined the effect of imiquimod on refractory IGM. Materials-Methods: Inclusion criteria consisted of histologically proven IGM, worsening disease despite using several treatment modalities including NSAIDS, high-dose steroids, methotrexate, and colchicine, with or without other medications. Previous surgery for the disease was not a contraindication. Patients with abscesses or open wounds were excluded. The patients applied imiquimod over the breast lesions at bedtime except on two days of the week. They were serially examined and checked for safety and response to treatment. Results: The first patient, 35 years old, had a mass occupying 70% of the right breast, skin edema and retraction, and a disabling sense of breast heaviness. The second patient, 40 years old, had a very swollen sore left breast that had restricted her life functions. She had a large mass involving around 90% of the breast and discharging fistulae. Lesions of both patients improved weekly, while ulcers appeared on the breasts; these were managed with phenytoin cream. The disease resolved after 7 and 4 weeks of treatment in the first and second patients, respectively. Skin retraction and discoloration remained in the first, but the only remaining sequela was deformity three months after treatment discontinuation. Conclusions: The two patients were satisfied with the outcomes. Imiquimod can be considered as an emerging treatment modality in some cases of IGM. We propose further studies to investigate this suggestion, considering the likelihood of the appearance of ulcers.

Keywords: benign breast disease, breast mass, granulomatous lobular mastitis, immunomodulator, topical treatment

[PP-060]
LYMPHOMA PRESENTING AS A PRIMARY BREAST LUMP IN A MALE

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A 68 year old gentleman presented to the outpatient breast clinic after being referred from primary care with a complaint of a breast lump, present for a few weeks. On clinical assessment, he was noted to have a P5 lesion in the left, lower outer quadrant, with discomfort on palpation. No associated nipple changes or skin changes were noted. A palpable left axillary lymph node was also identified in completion of the clinical examination. A working diagnosis of breast carcinoma was formulated and investigations were booked accordingly.

An ultrasound of the breast together with an ultrasound guided biopsy of the affected area was performed urgently. Mammography was also performed in the same sitting. The ultrasound reported a lobulated hypoechoic lesion measuring 16 x 8 x 14 mm correlating to the clinically palpable lesion. 3 cores were obtained via biopsy, together with an fine needle aspirate of the palpable axillary lymph node. Mammography re-enforced the ultrasound findings. These were concluded to be BIRADS (Breast Imaging Report and Data System) 5.

The fine needle aspirate was reported as a reactive lymph node aspirate. Histology from the core biopsies identified a classic follicular lymphoma (grade 3A). He was discussed in the breast multi disciplinary meeting were a consensus was reached to refer to the haematology specialists for medical management of his condition in the first instance. A treatment strategy is currently being formulated from the haematology point of view for his condition.

Keywords: Breast, Surgery, Pathology, Lymphoma

[PP-061]
THE DIAGNOSTIC CHALLENGES OF SECRETORY CARCINOMA OF THE BREAST: A REPORT OF TWO CASES

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Background: Secretory breast carcinoma (SBC) is a rare subtype of triple negative breast cancer (TNBC), accounting for < 0.15% of all breast cancers [1]. Accurate diagnosis is critical due to its good prognosis compared to other TNBCs. SBC can present clinically and radiologically with non-specific findings. Subsequently, diagnosis and treatment are based on histological and immunohistochemical findings. We present two cases which were referred for specialist opinion due to the diagnostic challenges they presented.

Objectives: To highlight the histological diagnostic challenges of SBC.

Methods: We analysed two cases diagnosed as SBC on specialist referral; one was originally diagnosed as adenoid cystic carcinoma and the second as encapsulated papillary carcinoma. We describe the macroscopic, microscopic, immunohistochemistry and molecular findings of both cases.

Results: Macroscopically, case 1 was an ill-defined lesion whereas case 2 was well-defined. Microscopically, both tumours on wide local excision displayed characteristic eosinophilic hyaline secretions but varied in their morphology and architecture.
Case 1 demonstrated mild to moderately atypical cells with infrequent mitoses arranged in tubular, cribriform and solid architecture.
Case 2 displayed solid and glandular areas alongside papillary architecture that mimicked a papillary neoplasm. CK5, GATA3, S100, SOX10 were positive while PR, HER2, p63, SMM were negative. Both tumours showed weak ER expression and positive Pan-TRK immunohistochemistry. The diagnosis was confirmed by NTRK RT-qPCR identifying the ETV6-NTRK3 gene fusion.
Both patients received radiotherapy and avoided neoadjuvant and adjuvant chemotherapy. They remain well without evidence of recurrence/ metastasis after 25 and 3 months of follow up respectively.
A high level of suspicion of SBC is required with TNBC / ER low positive breast cancer of unusual morphology. Correct diagnosis is essential for appropriate management and avoiding overtreatment.

References: 1. Min, Ningning et al. "Advancement of secretory breast carcinoma: a narrative review." Annals of translational medicine vol.10,21(2022): 1178. doi:10.21037/atm-22-2491

Keywords: Secretory Carcinoma, Breast Cancer, Secretory Breast Carcinoma, Histopathology

[PP-063]
DEEP INSPIRATION BREATH-HOLD TECHNIQUE FOR ALL PATIENTS WITH LEFT SIDED BREAST CANCER IN LOW RESOURCE COUNTRY- DOES IT CAN BE BASED ON ANY SELECTION CRITERIA?

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Background: Cardiac dose reduction results from using the deep inspiration breath hold (DIBH) technique in patients undergoing radiotherapy for left-sided breast cancer. This paper aims to recommend potential patient selection criteria for DIBH based on a retrospective study of free breathing (FB) and DIBH CT simulation scans.

Methods: Dosimetric and non-dosimetric comparisons were performed retrospectively for 30 patients in a single institute correlating the heart, LAD, lung (V20) dose, patient anatomical factors (anatomical variation of chest shape, heart to chest wall distance, CHD etc), location of tumor,physical factors (Height, Weight, BMI).

Results: After statistical analysis showed significant cardiac dose reduction for most patients with DIBH but not all. Minimal cardiac dose reduction was observed for nine patients using their DIBH plan. On top of that in DIBH plans some patients were getting more ipsilateral lung dose (V20) than FB plans and variable dose difference in LAD in between these plans. Heart dose was less in patient having CHD less than 1 cm and Heart to anterior chest wall distance was more than 0.5cm in FB scans. Those patients having BMI >25kg/m2 getting less benefit from DIBH technique as Lung expansion, CHD and Heart to chest wall distance not vary too much than FB scans. There was also significant relationship between lower quadrants especially lower inner tumor, heart and LAD dose.

Conclusion: The Heart to chest wall distance, CHD measured on a FB planning scan, location of tumor and BMI could potentially be utilized to predict cardiac exposure and assist with patient selection for DIBH. This is important in resource allocation, as DIBH may be unnecessarily recommended for some patients with little dosimetric benefit. Even there is a concern in this study that with DIBH plan patients were receiving more lung doses which can increase long term complication like radiation pneumonitis.

Keywords: FB= Free Breathing, DIBH= Deep Inspiration Breath Hold, CT= Computed Tomography, CHD=Central Heart Distance

[PP-065]
DETERMINING THE TUMOR BED BOOST AREA POST-ONCOPLASTIC SURGERY THROUGH COLLABORATIVE DECISION-MAKING BY RADIATION ONCOLOGISTS AND SURGEONS

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Introduction: In oncoplastic breast surgery (OBS), determining the boost to the tumor bed (TB) based on seroma and clips may be insufficient as the target volume can shift. Wide-field irradiation to avoid underdosing the tumor bed can cause side effects, particularly compromising cosmesis, which is a key reason for OBS. Administering a boost to TB, especially in young and high-risk patients, reduces the risk of recurrence in the same breast and thus cannot be omitted. There is no consensus on how to perform the boost after OBS. Close collaboration between the surgeon and radiation oncologist regarding the OBS technique during planning is recommended.

Materials-Methods: We retrospectively evaluated 20 patients (mean age 50.4 years, range 28-76) who underwent OBS at SBÜ Trabzon Kanuni Training and Research Hospital between 2016 and 2020. Detailed discussions between the oncological surgeon and radiation oncologist led to the final boost planning.

Results: Among the patients, 9 (45%) had cancer on the right side and 11 (55%) on the left, with stages I-III breast cancer (2 (10%) stage III). Surgical techniques included 2 (10%) Batwing mammoplasty (MP), 10 (50%) lateral MP, 2 (10%) inferior pedicle MP, 2 (10%) J MP, and 4 (20%) periareolar MP. Planned target volumes (PTV) were: PTVmax average 65.6 (63-72) Gy, PTVmean 62.3 (60-67) Gy, and maximum skin doses 65.7 (61-72) Gy. During a median follow-up of 73 months (range 29.2-100.7 months), no local recurrence, metastasis, fat necrosis, atrophy, chronic pain, or fibrosis was observed. Only one patient (5%) died from non-cancer-related causes. One patient (5%) developed a shrinking seroma, and 9 (45%) experienced skin thickening up to 5 mm.

Conclusion: After OBS, determining the tumor boost area is challenging due to potential shifts in the tumor bed caused by flap rotations. Relying on seroma and clip placement may be misleading.

Keywords: oncoplastic surgery, boost radiotherapy, tumor bed

[PP-066]
ANALYSIS OF BREAST ACUTE RADIODERMATITIS IN POSTOPERATIVE RADIATION THERAPY

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Introduction: The most common adverse effect in postoperative breast radiation therapy, following breast conserving surgery, is acute radiodermatitis, that can cause pauses during RT and affect patients quality of life. There is no adequate prevention for acute radiodermatitis and an individual approach is important in patient's treatment.

The Aim: Aim of this study is evaluation of factors that may influence the acute radiodermatitis onset during and 90 days after breast cancer postoperative irradiation.

Material-Methods: In the Center for Radiation Oncology, University Clinical Center Kragujevac, during 2023, the retrospective analysis included 102 female breast cancer patients, treated with postoperative breast irradiation. The data was obtained form medical medical histories.

Results: All patients underwent breast conserving surgery with sentinel lymph node biopsy (37.5%) or axillary dissection (62.5%). Moderately hypofractionated regime received 30.6% patient, versus the conventional regimen (69.4%), and 34.7% had a boost, while in 21.2% of cases lymph nodal irradiation was also performed. Acute radiodermatitis was registered in 72.6% cases (62.3% grade 1, 31.9% grade 2 and 5.8% grade 3). The primary tumor characteristics, patient's habits and systemic therapy had no statistically significant influence on the appearance of acute radiodermatitis.

In patients whose skin thickness, before starting radiotherapy, was greater than 4 mm ($p=0.0001$) or breast volume larger than 1000 cm3 ($p=0.038$), acute radiodermatitis was registered significantly more often.

Conclusion: This results can single out patients at increased risk for the acute radiodermatitis development and help selecting those patients in whom intensified monitoring is necessary.

Keywords: breast cancer, postoperative radiation, acute radiodermatitis, breast volume

[PP-068]
SEXUAL SYMPTOMS IN BREAST CANCER PATIENTS RECEIVING ADJUVANT ENDOCRINE THERAPY

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Objective: Breast cancer is the leading cause of cancer related death among woman around the world. With 2.2 million new cases and 600.000 deaths annually, it is one of the biggest public health problems among woman as well. New advances on both the diagnosing and treating breast cancer led to an almost %90 of 5-year survival rate on wealthy countries. Even though these advances prolong the lives of patients, they come with a symptom burden which lowers the patient's quality of life. Sexuality is one of the more important factors of quality of life among breast cancer patients. Almost every breast cancer patient (%93) experiences some sort of sexual symptom, despite this significance sexual symptoms remains one of the more undertreated side effects of breast cancer treatment. This study carried out a structured and comprehensive systematic review of literature to identify the nature of these sexual symptoms.

Materials-Methods: The search was conducted in Google Scholar, PUBMED, Web of Science and CINAHL. "Breast cancer", "sexual symptoms", "hormone therapy", "endocrine therapy" and "symptom burden" keywords were used. Articles published between years 2014-2024 and written in Turkish or English were included in this systematic review.

Results: Total of 2,287 articles were found at the initial search and after the investigation of these articles a total of 13 of articles were included in the systematic review. Most common reasons that are associated with sexual symptoms were body image disruptions, lower physical activity, fatigue and sleep problems.

Conclusion: Results of this systematic review show significant results, nevertheless more research with higher quality regarding the sexual problems of breast cancer patients receiving adjuvant endocrine therapy should be conducted.

Keywords: Breast cancer, sexual symptoms, hormone therapy, endocrine therapy, symptom burden

[PP-070]
EVALUATION OF THE USE OF TISSUE ADHESIVE FOR WOUND AFTER BREAST SURGERY

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Introduction: Post-operatively, dressing materials are used to protect the wound. However, dressings require changing and can occasionally result in sensitivity reactions. Conversely, the use of tissue adhesives avoids the need for dressing change, which reduces a hospital trip for the patient and decreases nursing workload. We aimed to evaluate the usefulness of tissue adhesives for breast wounds, particularly its cost and benefits as compared to conventional dressing.

Methods: Patients who used tissue adhesives during the operation for their breast wounds from September 2021 to December 2023 were reviewed retrospectively. Complication rate and cost associated with the use of tissue adhesives were analysed.

Results: Tissue adhesives were used in 376 breast surgeries. There was no major complications. Compared to conventional dressing, tissue adhesive was about SGD 50 more expensive. However, compared to patients with dressing, patients with tissue adhesives could offset this additional cost by avoiding a trip to hospital for dressing change which cost between SGD 25-36. The patient also saved time and the expenses needed to travel to the hospital for the dressing change. A dressing change time of about 20 minutes by the nurses for each patient was avoided too.

Conclusion: Tissue adhesive is safe though slightly more costly than conventional dressing. However, after considering the travel expenses needed to do the dressing change in the dressing group, the cost now becomes comparable. Tissue adhesive also provides other benefits such as avoidance of a hospital trip and time saving for the nurses so that nursing resources can be better utilized in other areas.

Keywords: Tissue adhesives, breast surgery, breast nursing, dressing

[PP-071]
EVALUATION OF DEPRESSION, ANXIETY, SLEEP QUALITY AND SEXUAL FUNCTION SCALES IN BREAST CANCER PATIENTS RECEIVING ADJUVANT HORMONE THERAPY

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Aim: It was aimed to evaluate depression, anxiety, sleep quality and sexual dysfunction scales to measure quality of life in patients diagnosed with breast cancer receiving adjuvant endocrine therapy.

Materials-Methods: Beck Depression and Anxiety Inventory, Pittsburg Sleep Quality Index, Female Sexual Function Index scales were applied to 115 patients diagnosed with hormone receptor positive breast cancer who wereoperated in our clinic and received or were receiving adjuvant treatment, and their existing data were combined.

Results: We observed depression in 40% of our patients, anxiety problems in 22.6%, sleep problems in 49.2%, and sexual problems in 72.9%. Poor sleep quality was found as a result of the Pittsburg Sleep Quality Index in patients diagnosed with breast cancer between 3-6 months (p: 0.038). A worse sexual function rate was calculated according to the Female Sexual Function Index in patients using aromatase inhibitors (p: 0.032). Apart from this, no effect of the agents used in anti-hormone therapy on depression, anxiety and sleep was observed. A correlation was found between BDI and PSDI.

Conclusion: In our study, depression was found to be linked to sleep and sexual function. There is a possibility that loss of sexual function may ocur with aromatase inhibitors used as anti-hormonal therapy. In addition, we see that a decrease in sleep quality may be observed later on in the diagnosis of breast cancer.

Keywords: Breast Cancer, Anti-hormonal Therapy, Sexual Dysfunction, Sleep Quality

[PP-072]
INITIAL EXPERIENCE WITH TARGETED AXILLARY DISSECTION FOR BREAST CANCER PATIENTS AFTER NEOADJUVANT CHEMOTHERAPY IN A TERTIARY BREAST CENTRE

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Background: TAD (targeted axillary dissection) involves sentinel lymph node biopsy and removal of the initially clipped metastatic node. TAD could allow patients with nodal pathological complete response after neoadjivant chemotherapy to avoid any axillary node dissection (ALND). Being a relatively novel concept, we aimed to report our initial experience with TAD, especially regarding its technical feasibility with not well-reported techniques such as skin marking and its oncologic outcomes with TAD alone.

Methods. Non stage 4 patients with biopsy proven nodal disease were recruited prospectively. The method of localisation of the clipped nodes were dependant on the surgeon's preference. Skin marking technique was performed for clipped nodes < 1.3cm from skin. An ALND was performed for patients with residual disease on TAD. For patients with TAD alone, the patients were also followed up for axillary recurrence.

Results: 17 patients underwent TAD and 11 also had ALND, with the clipped node representative of residual disease. Skin marking, saviscout and radio guided occult lesion localisation were used successfully for clipped node localisation in 9,7, 1 patients respectively with no complications. A median of another 2 (range 0-5) nodes were harvested. On median follow up of 12 months (range: 2-30), there was no axillary recurrence in the 7 patients with TAD alone.

Conclusion: The clipped node can be localised safely and accurately using various techniques, depending on surgeon's preference. For patients with TAD alone, there was no axillary recurrence on short term follow up. Our results will need validation with larger studies and longer follow up.

Keywords: Breast Cancer Surgery, Targetted axillary dissection, Localization techniques

[PP-074]
CENTRAL PEDICLE THERAPEUTIC MAMMOPLASTY AS ONCOPLASTIC BREAST CONSERVATIVE SURGERY TECHNIQUE IN MODERATE SIZED BREASTS WITH PTOSIS

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Background-Aim: Wise pattern mammaplasty is one of the most frequently performed oncoplastic approaches for breast cancer surgery. Blood supply of the NAC can be based on different pedicles.

Conventional therapeutic reduction techniques is not the best technique for moderate sized breasts with ptosis. Central pedicle mammaplasty -originally a mastopexy technique- can be used for breast cancer management in these relatively smaller breasts (Cup B/C with ptosis). In this study, we report our experience of central pedicle mammoplasty as an oncoplastic technique for the above-mentioned patients presenting with operable breast cancer.

Methods: Required ethical approvals were obtained. A prospective study that included 48 female patients presented to Alexandria Main University Hospital was carried out in the period from October 2018 till October 2022 with a minimum follow-up of 12 months. All the patients underwent therapeutic central pedicle mammoplasty via wise pattern skin incision. Contralateral Breast symmetrisation was offered to all patients.

Results: The procedure was performed 59 times in 48 patients included. Mean operative time was 90.53±11.3 minutes. Complication rate was 8.33% and involved mainly T junction failure and seroma. All patients were discharge within 24 hours. No re-operations or hospital readmissions needed. No local or regional recurrence reported during the study period.

Conclusion: Central pedicle mammaplasty can achieve acceptable oncologic and aesthetic outcome for breast cancer female patients with cup B and C ptotic breast. The technique can be applied in different breast quadrants as long as the central pedicle can be preserved

Keywords: breast cancer, BCS, mammaplasty

[PP-075]
MATRIX ROTATION; VOLUME REDISTRIBUTION TECHNIQUE FOR SPECIFIC UIQ TUMORS INDICATIONS

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Objective: Oncoplastic breast surgery for upper inner quadrant (UIQ) tumors have been always a challenge especially when excision of an area of overlying skin is needed. Surgical techniques such as round block and reduction techniques are valid options.; However, they are not the optimal option if the skin is involved.

This study aimed at assessment of matrix rotation as a volume redistribution option for management of UIQ tumors close to or invading the skin. The authors prefers to use the term "volume redistribution" rather than "volume displacement or replacement" as a better descriptive term for the technique

Methods: Required ethical approvals were obtained. A prospective study was conducted at Alexandria Main University Hospital in the period from August 2019 till March 2024 and involved female patients with UIQ operable breast cancers in whom excision of overlying skin was indicated. Preoperative surgical drawings were performed in a standing position. Inverted triangle, involving the area to be excised -together with the area of skin of concern-, was planned with its base extending laterally as an arc to the mid axillary line. After excision, rotational dermo-glandular flap was used to close the defect.

Results: 22 Patients were included in the study. The mean operative time was 40+12 minutes. All the patients were discharged on the same day with no drains. The main concern was the long vertical scar. Otherwise, no complications were encountered. 81.81% of the patients reported extreme satisfaction with the cosmetic result.

Conclusion: Matrix rotation is a feasible surgical technique for UIQ tumors requiring excision of the overlying skin with a favorable cosmetic outcome. Operative time is relatively short with no reported complications.

Keywords: breast cancer, oncoplastic, matrix rotation

[PP-076]
BREAST REDUCTION AFTER BREAST CONSERVING SURGERY AND RADIOTHERAPY: AVOIDING COMPLICATIONS

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Objectives: Breast conserving therapy is one of the mainstays of breast cancer therapy. After the removal of the tumor, the remaining breast tissue is preserved with partially preserved sensation. The aim of this study was to assess the results of the reduction mammoplasty of patients who had previous breast conserving surgery and adjuvant radiotherapy. Also, the techniques that were performed in order to avoid the complications were evaluated.

Materials-Methods: Patients who had previous breast conserving surgery and adjuvant radiotherapy and who underwent reduction mammoplasty between January 2021 and January 2023 were included. The operative technique consisted of a skin reduction pattern and different pedicle patterns according to the localization of the previous resection. Electronic health records and preoperative and postoperative photographs of the patients were evaluated.

Results: Five female patients were included in the study and the mean age of the patients were 49 years(42 – 59). The mean time period between the final adjuvant radiotherapy and reduction mammoplasty was 3 years(2 – 5). The mean followup period of the patients was 15 months(3 – 27 months). The left breast was irradiated in three patients whereas the right breast was irradiated in two patients. The primary tumor was at the infero-medial quadrant in three patients whereas it was at the superolateral quadrant in two patients. The Wise skin reduction pattern was preferred in four patients whereas the vertical pattern was preferred in one patient. The superior pedicle, the superomedial pedicle and the inferior pedicle were performed in 2, 1 and 2 patients respectively. Two patients healed unevenfully. One patient complained of unsatisfactory aesthetic result. One patient had prolonged serous drainage.

Conclusion: Breast reduction and mastopexy may be performed safely after breast conserving surgery and radiotherapy. The patients may be satisfied and acceptable results may be obtained with precise timing, planning and followup.

Keywords: Breast conserving surgery, breast reduction, complication, radiotherapy

[PP-081]
UNCOMMON INFECTIONS MIMICKING BREAST CANCER

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Breast cancer can be clinically mimicked by infectious diseases complicating accurate diagnosis and management. Tuberculosis and Cryptococcus, can present with masses in the breast with abnormal imaging, similar to malignant tumors.
Case 1: 33-year-old female healthcare worker presented with a 3 week history of left breast tenderness with erythema and fullness not responding to antibiotics. She had a 10cm fluctiation at 9 o'clock position with a palpable mass measuring 7x4cm extending retroareolary at 12 o'clock. Ultrasound showed parenchymal and dermal oedmea with no evidence of malignancy. There was extensive multiloculated thick collections and only 35mls of pus was aspirated. In view of the multiloculations, she underwent incision and drainage under general anaesthesia. Microscopy and culture (MC&S) showed abundant polymorphs but no bacteria. Special stains for microorganisms (PAS-D and Ziehl-Neelsen) and mycobacterial PCR tests detected Mycobacterium spp., consistent with mycobacterial granulomatous inflammation. She was investigated for HIV test which was negative She was seen at the infectious disease unit and was given rifampicin, pyridoxine, ethambutol, isoniazid and pyrazinamide for 6 weeks as treatment with maintenance rifampicin, pyridoxine and isoniazid for a total of 6 months. She had clinical resolution after 3 months and repeat US showed resolution with only residual scarring.

Case 2: 66-year old female diabetic with renal transplant on Tacrolimus and Prednisolone, investigated for a 2cm left breast lump associated with swelling and erythema. On US this was lobulated, hypoechoic and irregular BIRADS 4C. She underwent ultrasound-guided biopsy which showed fungal parasite within the histiocytes amidst florid granulomatous response on histology. Serum sample detected Cryptococcus neoformans antigen. CT brain and thorax were done and these showed multiple bilateral ground glass changes in both lungs and mild brain atrophic changes corresponding to age. Given her history, overall findings were that of atypical pneumonia. She was started on Liposomal Amphotericin B followed by Fluconazole. Ultrasound breast showed complete resolution after 3 months.

Breast tuberculosis is a rare form of extrapulmonary TB, constituting less than 1% of breast diseases. The disease spreads to the breast via haematogenous routes, direct extension from nearby infected tissues or lymphatic spread. It primarily affects women of reproductive age, especially in TB-endemic regions. The first case had not been in a TB-endemic region but being a healthcare worker, could have exposed her. Cryptococcus infection in humans occurs following inhalation of yeasts or spores. It typically affects immunosuppressed individuals and is rarely seen in immunocompetent individuals. It is abundant in avian excreta making feral pigeons a likely source in urban Malta. Opportunistic infection of the lung results in subsequent hematogenous dissemination which may lead to damage of the nervous system leading to cryptococcal meningoencephalitis. Imaging, microbiology and histology are crucial to distinguish between infectious and malignant etiologies, to implement timely and effective treatments.

Keywords: cryptococcus, mycobacterium tuberculosis, breast cancer

[PP-082]
CHEST WALL PERFORATOR FLAPS; ONE METHOD OF VOLUME REPLACEMENT IN CENTRALLY LOCATED BREAST CANCER TUMORS

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Background: Excision of centrally located breast tumors is considered a challenging procedure. The loss of breast contouring and projection is a bad experience for the patients. Many procedures were described for managing these central tumors. This study aimed at assessment of feasibility of chest wall perforator flaps in the management of central breast tumors as well as the patient degree of satisfaction.

Methods: ethical approval was obtained from our institution research ethics committee. A single arm prospective study was conducted in Alexandria Main University Hospital on patients fulfilling the recruitment criteria.

Results: The study was conducted from May 2019 till May 2023 with a minimum follow-up of 12 months. 42 female patients with centrally located breast cancer lesions indicated for central quadrantectomy were included. The nipple-areola complex was excised in 31 of them (73.8%). Margins were assessed by intraoperative imprint cytology. AICAP flaps were used in 29 (69%) patients. 9 patients (21.4%) were managed by LICAP and 4 patients (9.5%) underwent TDAP. An area of skin island was used to substitute the areola in 13 patients (30.95%). Complications were encountered in 15 cases (35.7%). These included seroma, hematoma, wound infection and wound dehiscence. Patient satisfaction which was assessed by a simple Likert scale ranged between extremely satisfied 28 patients (66.67%), satisfied 10 patients (23.8%), neither satisfied or dis-satisfied 3 patients (7.14%), dis-satisfied 0 patient and extremely dis-satisfied 1 patient (2.4%)

Conclusions: Chest wall perforator flaps offer a good alternative to other oncoplastic procedures for the management of centrally located tumors. Further studies and training on different techniques are needed to improve the aesthetic outcome and decrease the complications

Keywords: chest wall perforators, oncoplastic, central tumors

[PP-083]
MALE BREAST CANCER EXPERIENCE OF OUR CLINIC OVER FOURTEEN YEARS PERIOD

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Male breast cancer (MBC) accounts for around 1% of all breast cancers diagnosed. MBC is associated with significant mortality and morbidity. It is most likely due to lack of awareness in the general population. MBC present with more advanced disease and older age. MBC more often expresses estrogen (ER), progesterone (PR) and androgen receptors (AR), with a lower likelihood of human epidermal growth factor 2 (HER2) overexpression. Invasive ductal carcinoma accounts for approximately 83% of all MBC cases whereas lobular cancer is infrequent in men due to the absence of lobule development. The principal molecular subtype in MBC is luminal A, with lower frequencies of luminal B and basal-like subtypes, including triple negative. Risk factors include increased longevity, obesity, testicular diseases and tumours, and germline mutations of BRCA2. BRCA2 carriers have 80 times the risk of the general population. Mostly mastectomy and sentinel lymph node biopsy is the prefered treatment in recent literature. The prognostic results are lower than the women in MBC.

Between 2010-2024 in our clinic we have operated 24 MBC cases with the mean age of 59,6. 7 had neoadjuvant chemotheraphy wheras all had standard mastectomy including 6 SLNB. All had reported as invasive ductal carcinomas. In totally, 2 patients had local recurrences, whereas 6 had diagnosed metastasis to bone, liver and brain. And in the 6 metastasis cases, 4 patients had died because of MBC although they had proper treatment.

Male breast cancer is rare and understudied disease. Incidence is increasing worldwide. Diagnosis is made based on morphological features, immunohistochemical profile, history and imaging methods. Significant progress has been made over the past few decades in understanding the biology, pathology, outcome and optimal management of the disease and its differentiation from female breast cancer. Our results are just as the results of literature in the current issues.

Keywords: male breast cancer, prognosis, survival

[PP-086]
DIAGNOSTIC AND MANAGEMENT CHALLENGES IN A CASE OF PSEUDOANGIOMATOUS STROMAL HYPERPLASIA (PASH) MIMICKING FIBROADENOMA

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Pseudoangiomatous stromal hyperplasia (PASH) is a rare benign breast disorder that typically presents as small foci. Estrogen-treated elderly women are most affected. Histologic proof is needed because PASH can clinically and radiologically mimic fibroadenoma. Surgical excision is best for well-defined lesions, but tamoxifen is effective in diffuse situations. PASH diagnosis and treatment are discussed in this presentation to improve patient care.

A 30-year-old female has cystic breast disease without any hormonal treatment, applied with palpable masses in both breasts. Ultrasound and MRI scans detected many suspicious masses, highlighting the potential of a nearly 4 cm phyllodes tumor in left breast. The biopsy result revealed the presence of fibroadenoma on the right side and phyllodes on the left without any mitotic activity, which changed the course of treatment. Bilateral skin-sparing mastectomy with sentinel lymph node biopsy and immediate breast reconstruction using implants was recommended.

The treatment strategies for PASH vary from conservative to surgical procedures; total removal of the tumor to mastectomy. Mastectomy followed by reconstructive surgery may be recommended in cases of diffuse lesions. Alternatively, tamoxifen can be used as a medical treatment to manage the condition. The post-treatment recurrence rate varies from 15% to 22%, and there have been no reported cases of malignant transformation in the literature.

Keywords: Pseudoangiomatous Stromal Hyperplasia, breast surgery, fibroadenoma, phyllodes tumor

[PP-088]
RETAINED BREAST TISSUE MARKER, ORDER IN CHAOS

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Background: Biopsy site marker (BSM'S) placement considered fundamental part of management pathway of Almost all breast lesions. Needless to mention, Excision of these markers along with breast lesion in a crucial part of a well-planned breast surgery.

Retained post breast conserving surgery marker is an expected complication to the uprise of breast conserving surgery for qualifying breast lesions.

Such a complication creates concerns of missing index cancer as these markers points to the core of the lesion!

Objective: The purpose of our study is to report four cases of retained BSM's post breast conserving surgery with a proposed management algorithm of such case and the follow up outcome.

Methods: This retrospective study included 4 patients (median age, 42 years) who underwent breast conserving surgery between August 2020 and August 2022 for biopsy proven breast cancer followed by neoadjuvant chemotherapy and breast conserving surgery. The initial postoperative mammography showed a retained non-migrated biopsy site marker The index pathology from CNB and initial surgical resection were reviewed. the retained markers retrieved with surrounding tissues by different methods (one case done by wire guided surgical excision and three cases done by stereotactic guided excision) Histopathogy of the retrieved tissues confirmed no residual malignancy.

Results: None of the four cases had residual malignancy in excised breast tissues with the marker, this is might be explained by good response to neoadjuvant chemotherapy evident by complete pathological response on the breast conserving surgery sample. None of the cases developed local or distal metastasis on two years extensive surveillance follow up.

Conclusion: Patients with retained BSMs for malignant lesions rise the -concerns of missing malignancy and needs a clear plan of management. Accord Wire-guided surgical re-excision gave the same results to the stereotactic excision which is less invasive. Active surveillance is a another reasonable management strategy.

Keywords: Breast, malignancy, tissue marker, biopsy

[PP-089]
TRANSPOSITION FLAP- A SIMPLE SOLUTION FOR PARTIAL BREAST RECONSTRUCTION IN RESOURCE LIMITED SETTING

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Objective: Oncoplastic breast surgery is the standard of care in most of the breast cancer patients. In developing countries, patients often present with larger tumors resulting in larger resection. Lattisimus dorsi(LD) flap has been a workhorse flap for partial breast reconstruction. We present our experience using a transposition flap based on the principle of dermal-subdermal blood supply for defects in the outer quadrants of the breast.

Materials-Methods: Ten women who underwent oncoplastic breast surgery using transposition flap from lateral chest wall tissue between March 2023 and Feburary 2024 were included in the study. Patients with tumors involving the outer quadrants of the breast were included, irrespective of the age of the patient, body mass index or smoking history.

Results: The median age was 37 years (26–68 years). Out of 10, 08 had upfront surgery. Average Tumor size was 2.7 cm and 2.2 cm in upfront and post-neoadjuvant chemotherapy(NACT) patients, respectively. All patients undergoing upfront surgery had the axillary sampling procedure, and if node positive, had a complete axillary lymph node dissection up to level 3. Those who were operated post-NACT underwent complete ALND up to level 3. The average volume of resected specimen was 290 ml and 250 ml for the upfront and post-NACT cases, respectively. Majority (06/10,) of the tumors were in upper outer quadrant (UOQ).Only one patient developed seroma. There was no flap necrosis in any patient. At a median follow up of 7 months, cosmetic outcomes were good in all patients.

Conclusions: Transposition flap form lateral chest wall based on the dermal-subdermal plexus can be effectively used as an alternative to LD flap for outer half breast defects. It is easy to learn, does not need the use of magnification and hand help doppler system making it an excellent choice for reconstruction.

Keywords: Oncoplastic breast surgery, transposition flap, partial breast reconstruction

[PP-090]
WHO IS FEASIBLE FOR OMITTING BREAST SURGERY AFTER NEOADJUVANT SYSTEMIC TREATMENT FOR INVASIVE BREAST CARCINOMA?

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Pathological complete response (pCR) after neoadjuvant systemic treatment (NST) for invasive breast carcinoma is a surrogate marker for less recurrence and improved patient survival. HER2 positive and TN subtypes have the highest likelihood of pCR rates exceeding 60%. We planned multicenter, prospective, feasbility trial in patients with exceptional responders. We present the results of our patients.

Aim: The aim of this study is to assess the accuracy of postchemo-presurgical image-guided core biopsy to predict treatment response in breast cancer patients.

Methods: Between January and May 2024, the patients with tripple negative or HER2 positive breast cancer whose MRI after neoadjuvant systemic therapy had complete response were included. In order to detect treatment response standardized biopsy protocol was utilized, consisting of 10 samples from neighbouring the marked tumor area per patient by 12 G core needle.

Results: The mean age of the patients was 47.3 years. Postchemo-presurgical core biopsy showed that 10 out of 12 patients (8 TN, 4 HER-2 +) achieved a complete response (83.3%), the rest had invasive tumors. There was no non-representative analysis in histopathological evaluation of biopsies. All biopsy results were concordant with findings of surgical specimen.

Conclusion: Thorough patient selection and the reliable biopsy technique are the key points for the achievement of pCR. The patients with TN and HER2 positive breast cancer whose post-NST MRI had complete response and who had no tumor tissue confirmed by image-guided biopsy may be feasible patient in whom we can omit breast surgery after NST.

Keywords: neoadjuvant, omission, invasive tumor

[PP-091]
INITIAL EXPERIENCE WITH INTERCOSTAL ARTERY PERFORATOR FLAPS IN BREAST CANCER TREATMENT

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Objective: Oncoplastic surgery has provided better aesthetic results and quality of life in treatment of breast cancer patients. Volume replacement techniques are mostly performed in small to medium sized breasts especially in relatively larger tumors. intercostal arteries perforator flaps are the muscle-sparing chest wall flaps for partial breast reconstruction without a requirement of simetrization. We presented initial experience on this issue.

Method: This retrospective study included the patients diagnosed with breast cancer and reconstructed with intercostal arteries perforator flaps between June 2023 and May 2024. Preoperative marking was performed in whole cases. Doppler probe was preoperatively and intraoperatively used in identifiying of perforator vessels. Tumor and patients characteristics, surgical technique, complications and treatment modalities were evaluated.

Results: There were seven patients, with an median age of 57 years. Four patients were smokers. The histological types were invasive ductal carcinoma in six patients and invasive lobular carcinoma in one. Three patients had T1 and four patients T2 tumors. In 2 patients nodal involvement was detected. Tumor locations were lower outer in 3 patients, lower middle in 3 patients, and lower inner in 1 patient. Cup sizes were A in 2 patients, B in 4 patients, and C in 1 patient. After segmental mastectomy, 4 patients underwent AICAP and 3 LICAP procedure. Postoperative hospital stay was one day in all patients. Postoperative complications included seroma and lymphedema in one patient each. Three patients received neoadjuvant chemotherapy and all had radiotherapy. Patients' satisfaction was excellent for a mean follow up of 8 months.

Conclusion: After a partial breast resection in lower outer or lower quadrants, chest wall intercostal arteries perforator flaps are a safe choise of the patients with small to moderate breasts and limited ptosis. Thanks to this procedure, mastectomy rates are declining.

Keywords: Chest wall perforator flaps, Intercostal artery perforator flaps, Oncoplastic surgery

[PP-092]
DETERMINING THE NEED FOR METASTATIC STAGING IN PATIENTS WITH BILATERAL BREAST CANCERS DIAGNOSED AT AN INTERVAL APART

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Introduction: Bilateral breast cancers (BBC) diagnosed at an interval apart are uncommon. While metastatic staging guidelines are established in patients with unilateral breast cancer, its role in BBC diagnosed at an interval apart is unclear. We aim to identify the subgroup who would benefit from metastatic staging at contralateral cancer diagnosis.

Methods: Eligible patients were divided into three categories: (A) ipsilateral invasive cancer and contralateral ductal carcinoma in situ (DCIS), (B) bilateral invasive cancers and (C) ipsilateral DCIS and contralateral invasive cancer and reviewed retrospectively. We excluded patients with bilateral DCIS, synchronous BBC diagnosed within 6 months from first cancer, patients who were stage IV at first cancer diagnosis and patients with recurrence prior to contralateral cancer.

Results: Of 4516 newly diagnosed breast cancer patients, 79 patients were included. Systemic metastasis occurred in 15.6% of patients in Group B. Having nodal positivity of either cancer which were diagnosed <=30 months apart and nodal positivity of only the contralateral cancer when diagnosed >30 months apart was significantly associated with systemic metastasis (p=0.0322).

Conclusions: Utilising the nodal status and the time interval between the two cancers can be used to identify patients who will benefit from metastatic staging. This finding requires validation in larger studies.

Keywords: metachronous breast cancer, metastatic staging, bilateral breast cancer, systemic metastasis

[PP-095]
CRYOTHERAPY FOR THE TREATMENT OF B3 FIBROEPITHELIAL LESIONS (FELS)

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Introduction: The use of cryotherapy for the treatment of B3 fibroepithelial lesions (FELs) has not been well-documented. These FELs usually warrant an excision due to the risk of histological upgrade to phyllodes tumour. However, surgery is not without risks. Cryoablation, on the other hand, can be performed under local anaesthesia and is minimally invasive. Hence, it offers several advantages over surgery, such as shorter recovery time and scar.

Method: Patients with B3 FELs on core biopsy were recruited in a prospective trial to undergo cryotherapy. These treated lesions were then monitored using ultrasound. We report the outcomes of our first case.

Result: A 23-year-old patient presented with a lump over the lower outer quadrant of the right breast, which was diagnosed as a B3 FEL on percutaneous needle biopsy. She underwent cryoablation of the lesion under ultrasound guidance. There was no complication and the patient reported minimal pain post procedure. At 1-year follow-up, the patient reported excellent cosmesis. Ultrasound follow-up revealed no progression of the treated lesion. The patient will be next seen at 2 years follow-up.

Conclusion: Cryotherapy may be a feasible method to treat such lesions while avoiding surgery for patients. Larger studies with longer-term follow-up are required to validate these findings.

Keywords: B3, Fibroepithelial lesion, Cryoablation

[PP-098]
USE OF THORACODORSAL ARTERY PERFORATOR FLAP AS A PARTIAL VOLUME REPLACEMENT ONCOPLASTIC TECHNIQUE IN NO MAN'S LAND

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Introduction: upper inner quadrant breast cancers represent an oncoplastic problem specially in small and medium size breasts as conventional oncoplastic replacement techniques would significantly compromise the aesthetic outcomes. we present thoracodorsal artery perforator flap as a versatile volume replacement technique that can be used for immediate partial breast reconstruction following tumour excision in the upper inner quadrant.

Methodology: From June 2021 to May 2022, 12 patients with upper inner quadrant breast cancer underwent breast conservative surgery and immediate reconstruction with thoracodorsal artery perforator flap. perforator was localized preoperatively with hand doppler. we used the island flap perforator-based technique with complete dissection of the perforator through the muscle till the axilla so the flap could reach the upper inner quadrant without tension.

Results: The cosmetic results were self-assessed by questionnaires. we had only one flap necrosis post operatively with was manged with flap excision and direct closure for delayed reconstruction with lipofilling after radiotherapy. During the 2-year follow-up period, no local recurrence was detected in all our patients. 11 patients (92%) ranked their results as satisfactory and treated breasts were self-evaluated by them to be nearly identical to the untreated side with no need for contralateral symmetrisation.

Discussion: Although first described before other perforator flaps for breast reconstruction, the use of thoracodorsal artery perforator flap had been largely replaced by other perforator flaps like lateral and anterior intercostal artery perforator flaps for partial breast reconstruction due to technique simplicity and for preservation of thoracodorsal axis for delayed reconstruction if needed. However, in upper inner quadrant tumours (No Man's Land) thoracodorsal artery perforator flap remains the first option for immediate partial breast reconstruction with excellent cosmetic and oncological outcomes.

Keywords: thoracodorsal artery perforator flap, breast cancer, upper inner quadrant, No Man's Land

[PP-101]
CORRELATION BETWEEN BREAST AND AXILLARY PATHOLOGIC COMPLETE RESPONSE AFTER NEOADJUVANT CHEMOTHERAPY IN BREAST CANCER

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Aim: The aim of this study was to evaluate the correlation of the pathological response in breast tissue and the axilla of patients with breast cancer who underwent surgery following neoadjuvant chemotherapy.

Method: This retrospective cohort study included patients with T1-4, N1-3, M0 breast cancer who underwent surgery following neoadjuvant chemotherapy at Gaziosmanpasa Training and Research Hospital between 2013 and 2022. The response of the breast tissue to chemotherapy was evaluated with the Miller-Payne grading system, and the response of the axillary lymph nodes to chemotherapy was evaluated with the Pinder grading system. The patients were grouped histopathologically as luminal A, luminal B, Her-2 enriched, or triple negative breast cancer (TNBC).

Results: The study was completed with 140 patients. Pathological complete response (pCR) was seen in the breast in 40 patients and in the axilla in 34. Of the patients with pCR in the breast, pCR was also determined in the axilla in 45%. In the patients with pCR in both the breast and axilla, Her-2 enriched subtype, estrogen receptor negativity, progesterone receptor negativity, Her-2 neu positivity, and Ki-67 level >25% were determined to be effective ($p<0.05$). Her-2 neu positivity was evaluated as statistically significant in the development of pCR in both the breast and axilla (OR: 4.06, 95% CI:1.2-13.6, $p=0.023$).

Conclusion: The development of pCR in the breast, especially in the Her-2 enriched subgroup, can be accepted as a predictive factor for the evaluation of axillary response in patients with breast cancer. The least compatibility was seen in the luminal A subgroup.

Keywords: Breast cancer, Miller-Payne, Neoadjuvant chemotherapy Pathological complete response, Pinder

[PP-102]
VIRTUAL CONSULTATIONS FOR BREAST CANCER SURGERY IN ONTARIO: REDUCING WAIT-TIMES FROM DIAGNOSIS TO SURGICAL CONSULT

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Background: The COVID-19 pandemic required a rapid shift in the delivery of care, with many surgeons providing consultations virtually. Ongoing virtual care may provide a more timely initial assessment and reduce patient travelling time and expense. However, breast cancer (BC) patients require careful physical examination and virtual care may limit this evaluation. We aimed to describe BC patients who received initial virtual consultations and determine time from diagnosis to first visit compared to those seen in person.

Methods: This was a population-based cohort study using health administrative data in Ontario. We identified patients >18 years diagnosed with BC between March, 2020 and September, 2022. The date of initial consultation with a surgeon was identified. Using an algorithm based on billing code data, consultations were classified into either an in-person or a virtual visit. Differences between these groups were compared and the time from diagnosis to consultation was calculated.

Results: We identified 25,411 BC patients diagnosed during the study period, of whom 2,111 (9.1%) had an initial virtual surgical consultation. The greatest proportion of virtual consultations was in April 2020 (19.8%) and decreased thereafter. Compared to those seen in person, patients seen virtually were less materially deprived (25.8% lowest quintile of deprivation vs. 21.3%; $p < 0.001$). The wait time from date of diagnosis to surgical consultation was significantly lower for patients seen virtually compared to those seen in person (mean 3.8 days $\pm$ 35.7 vs 11.9 days $\pm$ 24.7; $p < 0.001$). However, virtual patients had a greater number of subsequent visits during the first year of cancer care (median 4 IQR 3-6 vs. median 3 IQR 2-5; $p < 0.001$).

Conclusion: BC patients who undergo an initial virtual surgical consultation since 2020 have shorter times to assessment and are less materially deprived. However, they undergo more subsequent visits.

Keywords: COVID-19, Virtual care, Breast cancer, Surgical consults, Canada

[PP-107]
SKIN AND NIPPLE NECROSIS RATES WHEN USING INFRAMAMMARY FOLD APPROACH FOR NIPPLE SPARING MASTECTOMY – A 5-YEAR SINGLE CENTRE RETROSPECTIVE STUDY

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Background: Nipple-sparing mastectomy (NSM) followed by immediate breast reconstruction (IR) has become standard of care when feasible and oncologically safe.

Nipple areola complex (NAC) and skin ischaemia / necrosis, is a major complication following NSM, leading to adverse aesthetic outcomes, infection and on occasion loss of an implant based immediate breast reconstruction. Several studies have identified the type of surgical incision as one of the risk factors of ischaemic complications. Amongst the most common incisions preferred are the; radial, periareolar and inframammary approaches.

Methods: At a tertiary large volume academic centre in London, we designed a retrospective study to analyse our immediate skin envelope related ischaemic complications using an inframammary incision for NSM and immediate implant based single stage breast reconstruction. For this we used Guy's and St. Thomas Hospital electronic patient records from 2019 to 2023.

Results: Our study is ongoing and we aim to have the data in time for the conference. We estimate a low incidence rate of ischaemic and necrotic complications with our favoured inframammary fold approach.

Conclusion: Based on our 5-year post-operative outcomes, we suggest the inframammary incision choice is oncologically safe with minimal impact to the NAC and flap viability.

Keywords: Necrotic rates, Inframammary fold incision, Nipple sparing mastectomy, Vasculature

[PP-108]
DUCTAL CARCINOMA IN SITU PRESENTING WITH LIVER METASTASIS

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Ductal carcinoma in situ (DCIS) by definition is the presence of carcinoma cells in a duct that is not breaching the basement membrane and is therefore referred to as a non-invasive disease. By the virtue of this definition, metastatic disease is not something one would expect and extremely rare to have metastasis with DCIS without an invasive disease and its magnitude has been published as less than 1%2, 3. Here we present a case report of a 40-year-old woman who had a lumpectomy for a biopsy proven DCIS, followed by completion mastectomy due to inadequate margin clearance for DCIS. Later after one year she presented with liver metastasis one year later that raises questions about re-visting the practice guidelines for management of DCIS.

Keywords: DCIS, liver metastasis, mastectomy

[PP-109]

EVALUATION OF THE MAGSEED LOCALIZATION TECHNIQUE FOR NON-PALPABLE BREAST TUMOURS IN YOUNG BREAST CANCER PATIENTS WITH DENSE BREAST PARENCHYMA: A RETROSPECTIVE SINGLE CENTER STUDY OF 114 CASES

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Magnetic seed localisation (MagSeed®, Endomag) for the excision of non-palpable breast lesions is endorsed in best clinical practice, based on several studies on patient cohorts with a mean age of approximately 60 years. Clinical data aiming accuracy in young patients with dense breast are insufficient. The aim of our study to analyze the accuarcy of Magseed localization in young patients with dense breast.

Methods: Women younger than 50 years with dense breast, having soliter, unilateral biopsy-proven cTis-cT3 cN0-2 M0 non-palpable breast cancer, and underwent MagSeed® localized wide excision between August 2022 and January 2024 were enrolled in this retrospective study. Each tumour have been marked by HydroMARK® at the time of biopsy. MagSeed® was placed 1-2 days before surgery under stereotactic or ultrasound guideance and confirmed by mammography.

Results: Data were collected from 114 patients with a mean age of 44.7 years. Breast density was classified by the American College of Radiology as C in 92 cases (80.7%) and D in 22 cases (19.3%). Sixty patients (52.63%) had primary systemic treatment. Successful localization of the index lesion was achieved in all cases. Location of the seed in the primary specimen was central in 75 cases (65.8%), excentric in 26 cases (22.8%) and peripheral in 13 cases (11.4%). Targeted re-excision was required in the same surgical session in 19 cases (16.7%). The surgical margin was R0 in 108 cases (94.8%).Correlation was found between breast density and location of MagSeed® in the specimen and the need of same session SM guided re-excision.

Conclusion: MagSeed® localization is a reliable method in terms of R0 excision for non-palpable breast cancers in young patients with dense breast. The density of the parenchyma and larger distance of seed from skin may negatively influence the identification of the seed.

Keywords: MagSeed, young breast cancer patients, dense breast parenchyma

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