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ORIGINAL ARTICLE / ARAŞTIRMA YAZISI

Geriatrics and Gerontology / Geriatri ve Gerontoloji

Skin Diseases in Geriatric Patients: One-year Single Center Experience

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ABSTRACT

Purpose: The aim of this study was to investigate the distribution and frequency of skin diseases in the geriatric age group, as well as the variation of this frequency according to age, sex, and season.

Methods: Data from 1039 geriatric patients admitted to our dermatology clinic between January 1, 2022 and January 1,2023 were retrospectively analysed according to sex, age and seasons.

Results: The five most frequently observed disease groups in elderly patients were eczematous dermatitis (22.4%), fungal infections (14.4%), infestations (10.1%), pruritus (6.9%), and premalignant skin lesions (6.4%). The most common five dermatologic diseases in all patients were contact dermatitis (11.16%), scabies (8%), tinea ungium (6.8%), actinic keratosis (6.1%), and generalized pruritus (6.1%), respectively. Generalized pruritus was significantly less frequent in the 65-74 age group compared with the other two groups ($p<0.001$), whereas fungal infections were significantly more frequent ($p=0.001$). Malignant lesions were significantly more frequent in the age group ≥85 years than in the other two groups ($p<0.001$). The incidence of skin ulcers was significantly higher in the age group ≥85 than in the age group 65-74 ($p=0.04$).

Conclusion: This study revealed a high incidence of scabies in the elderly population, which is an uncommon finding compared to previous studies. This increase reflects the rising incidence of scabies in our country in recent years. Increased awareness of skin diseases among the elderly can contribute to preventive medicine, early diagnosis, and timely treatment of these conditions.

Keywords: geriatrics, skin diseases, skin aging, dermatology

ÖZET

Amaç: Bu çalışmanın amacı, geriatrik yaş grubunda deri hastalıklarının dağılımı ve sıklığı ile bu sıklığın yaşa, cinsiyete ve mevsimlere göre değişimini incelemektir.

Yöntemler: 1 Ocak 2022 ile 1 Ocak 2023 tarihleri arasında dermatoloji kliniğine başvuran 1039 geriatrik hastanın verileri cinsiyet, yaş ve mevsimlere göre retrospektif olarak analiz edilmiştir.

Bulgular: Yaşlı hastalarda en sık görülen beş hastalık grubu egzematöz dermatit (%22,4), mantar enfeksiyonları (%14,4), infestasyonlar (%10,1), generalize kaşıntı (%6,9) ve premalign deri lezyonları (%6,4) idi. Tüm hastalarda en sık görülen beş dermatolojik hastalık sırasıyla kontakt dermatit (%11,16), skabiez (%8), tinea ungium (%6,8), aktinik keratoz (%6,1) ve generalize kaşıntıydı (%6,1). 65-74 yaş grubunda diğer iki gruba göre generalize kaşıntı anlamlı olarak daha az ($p<0,001$), mantar enfeksiyonları ise anlamlı olarak daha fazlaydı ($p=0,001$). Malign lezyonlar ≥85 yaş grubunda diğer iki gruba göre anlamlı olarak daha sıktı ($p<0,001$). Deri ülseri insidansı ≥85 yaş grubunda 65-74 yaş grubuna göre anlamlı olarak yüksekti ($p=0,04$).

Sonuç: Bu çalışmada önceki çalışmalardan farklı olarak yaşlı popülasyonda skabiez görülme sıklığı oldukça yüksek bulunmuştur. Bu durum ülkemizde uyuz insidansının son yıllardaki artışını yansıtmaktadır. Yaşlılarda görülen deri hastalıkları konusunda artan farkındalık, hastalıkların hem önlenmesinde hem de erken tanı ve tedavisinde olumlu sonuçlar doğuracaktır.

Anahtar kelimeler: geriatri, deri hastalıkları, deri yaşlanması, dermatoloji

Aging is an unavoidable process that impacts all organ systems, including the skin. Skin aging is an intricate process characterized by morphological and chemical changes that affect various layers of the skin, depending on intrinsic and extrinsic factors. Intrinsic aging primarily involves a decrease and deceleration in cell replacement, barrier function, wound healing, immunological responses, thermoregulation, and vitamin D production capacity. As individuals age, the epidermis and dermis become thinner, the number of melanocytes and fibroblasts decrease, and the functions of sweat and sebaceous glands diminish. On the other hand, extrinsic aging is caused by environmental factors such as UV radiation, air pollution, lifestyle choices, and dietary habits. The principal contributor to extrinsic aging is oxidative damage resulting from increased production of free radicals. Aging skin exhibits thin and deep wrinkles, dryness, delayed wound healing, reduced skin elasticity, sagging, pigmented spots, telangiectasias, and benign neoplasms (1). Although accepted as a natural physiological process, these changes can potentially contribute to the development of certain skin conditions such as xerotic eczema, pruritus, and skin ulcers (2).

Individuals who are 65 years and older are categorized as the geriatric population. Presently, there has been a rise in the elderly population in both developed and developing nations. The global geriatric population increased from 703 million (6% of the total population) in 2019 to 727 million (9.3% of the total population) in 2020. By 2050, the geriatric population is projected to constitute 16% of the global population (3). The gradual growth of the elderly population heightens the significance and relevance of diseases occurring in this age group (4).

The objective of this study was to examine the prevalence and distribution of skin diseases among the geriatric age group, while also exploring how this prevalence varies based on age, gender, and season.

Material and Methods

Ethical aspects

The present study was conducted according to the Declaration of Helsinki and approved by the Clinical Research and Ethics Committee linked to Giresun University Faculty of Medicine (approval number: 12, date: 07.02.2023).

Study design

In this retrospective cohort study, we analysed the patients aged ≥65 years who applied to our dermatology outpatient clinic between January 1, 2022 and January 1,2023.

The exclusion criteria are as follows: *i)* patients <65 years, *ii)* patients with inadequate data in medical records, iii) patients without a definite diagnosis, *iv)* recurrent applications of the same patient.

A total of 1039 geriatric patients were examined and sex, age, season of admittance, concomitant systemic diseases, diagnosis, duration and location of disease were recorded. The patients were classified according to sex, age (65-74, 75-84, and ≥85) and dermatologic diagnoses. These diagnoses were categorised into 22 groups including generalized pruritus, papulosquamous diseases, fungal infections, bacterial infections, viral infections, infestations, benign neoplasia, precancerous lesions, malign neoplasia, vesiculobullous diseases, eczematous dermatitis, disorders of skin appendages, cutaneous lymphomas, immune-rheumatic diseases, urticaria, acneiform diseases, drug eruptions, mucous membrane diseases, cutaneous ulcers, callus, xerosis, and others.

Statistical analyses

Statistical analyses were performed using the Statistical Package for Social Sciences for Windows version 21.0 (SPSS, Chicago, IL, USA). Categorical variables were studied as percentages and were compared using the Chi-square test. A p-value of <0.05 was considered statistically significant.

Results

Of the 8087 patients who presented to the dermatology outpatient clinic between January 1, 2022, and January 1, 2023, 1039 (12.85%) were over 65 years of age. Of these patients, 535 (51.5%) were female and 504 (48.5%) were male. The mean age was 78,56 ± 8,29 for women, 75,16 ± 7,07 for men, and 74,38 ± 7,47 years for all participants. Based on the age groups, 616 (59.3%) patients were in the 65-74 age group (302 female, 314 male), 298 (28.7%) patients were in the 75-84 age group (158 female, 140 male), and 125 (12%) patients were in the over-85 age group (75 female, 50 male).

The duration of the disease ranged from 1 day to 80 years. The season with the highest number of outpatient visits was autumn (313 patients, 30.1%). Autumn was followed

by summer (268 patients, 25.7%), winter (234 patients, 22.5%), and spring (224 patients, 21.6%). At least one systemic disease was present in 78.3% (812 patients) of patients. The five most common concomitant systemic diseases were hypertension (454 patients, 43.8%), diabetes mellitus (DM) (260 patients, 25%), other cardiovascular diseases (210 patients, 20.2%), pulmonary diseases (105 patients, %.) 10.1) and neurological diseases (79 patients, 7.6%).

In 24.4% (253 patients) of the patients, the lesions were distributed over the entire body. This was followed by the lower extremities (191 patients, 18.4%), face (157 patients, 15.1%), and trunk (142 patients, 13.7%) in order of frequency.

The first five groups of diseases most frequently observed in patients were eczematous dermatitis (22.4%), fungal infections (14.4%), infestations (10.1%), generalized pruritus (6.9%), and premalignant skin lesions (6.4%).

The most frequent types of eczematous dermatitis were contact dermatitis (49.8%), seborrheic dermatitis (13.7%), intertriginous dermatitis (%9.4), stasis dermatitis (8.15%), and xerotic eczema (5.15%), respectively. The distribution of fungal infections was tinea ungium (47.3%), tinea pedis (31.3%), tinea corporis (6.6%), tinea incognito (4.6%), tinea cruris (3.3%), tinea versicolor (3.3%), candidiasis (3.3%), and tinea manum (2.6%). Seventy-nine percent of infestations were scabies, 19.1% were mite infestations, 0.95% were pediculosis capitis, and 0.95% were demodicosis. The premalignant skin lesions were actinic keratosis (6.1%) and Bowen disease (0.2%).

Dermatitis and cutaneous lymphomas were significantly more common in men than women (p=0.004 and 0.027, respectively). There was a significant difference between the three age groups in terms of generalized pruritus, fungal infections, premalignant lesions, malignant lesions and cutaneous ulcers (p<0.001, p=0.001, 0.014, 0.00 and 0.021, respectively). Generalized pruritus was significantly less frequent in the 65-74 age group compared with the other two groups (p<0.001), whereas fungal infections were significantly more frequent (p=0.001). While there was no difference between the age group ≥85 and the other two groups in the frequency of premalignant lesions, it was significantly higher in the age group 74-84 than in the age group 65-74 (p=0.003). Malignant lesions were significantly more frequent in the age group ≥85 years than in the other two groups (p<0.001). The incidence of skin ulcers was significantly higher in the age group ≥85 than in the age group 65-74 (p=0.04). It was found that the number of patients diagnosed with urticaria was higher in summer (p=0.035), and the number of patients diagnosed with malignant skin lesions was higher in autumn than in other seasons (p=0.022). There was no seasonal difference in terms of other disease groups. Distribution of skin diseases according to sex, age groups and season are shown in Tables 1, 2, and 3, respectively.

Table 1. Distribution of skin diseases according to sex

	Female, n (%)	Male, n (%)	Total, n (%)	*p*
Eczematous dermatitis	101 (18,9)	132 (26,2)	233 (22,4)	***0.004****
Fungal infections	85 (15,9)	65 (12,9)	150 (14,4)	*0.122**
Infestations	53 (9,9)	52 (10,3)	105 (10,1)	*0.83**
Generalized pruritus	38 (7,1)	34 (6,7)	72 (6,9)	*0.92**
Premalignant skin lesions	37 (6,9)	30 (6)	67 (6,4)	*0.527**
Papulosquamous diseases	33 (6,2)	28 (5,6)	61 (5,9)	*0.778**
Viral infections	25 (4,7)	31 (6,2)	56 (5,4)	*0.296**
Benign skin neoplasia	35 (6,5)	20 (4)	55 (5,3)	*0.064**
Urticaria	20 (3,7)	11 (2,2)	31 (3)	*0.141**
Malign skin neoplasia	17 (3,2)	13 (2,6)	30 (2,9)	*0.565**
Callus	15 (2,8)	11 (2,2)	26 (2,5)	*0.522**
Xerosis cutis	9 (1,7)	15 (3)	24 (2,3)	*0.165**
Acne and acneiform skin lesions	8 (1,5)	13 (2,6)	21 (2)	*0.215**
Bacterial infections	6 (1,1)	13 (2,6)	19 (1,8)	*0.08**
Immune-rheumatic diseases	8 (1,5)	5 (1)	13 (1,3)	*0.466**
Cutaneous ulcers	8 (1,5)	4 (0,8)	12 (1,2)	*0.29**
Drug eruptions	4 (0,7)	3 (0,6)	7 (0,7)	*0.533***
Disorders of skin appendages	4 (0,7)	2 (0,4)	6 (0,6)	*0.687***
Cutaneous lymphomas	0 (0)	5 (1)	5 (0,5)	***0.027****
Mucous membrane disorders	2 (0,4)	2 (0,4)	4 (0,4)	*0.665***
Vesiculobullous diseases	3 (0,6)	1 (0,2)	4 (0,4)	*0.625***
Others	24 (4,5)	14 (2,8)	38 (3,7)	*0.186**

**Pearson's chi-square test, **Fisher' exact test. Significant P values are shown in bold.*

Table 2. Distribution of skin diseases according to age groups

	65-74years n (%)	75-84 years n (%)	≥85 years n (%)	Total n (%)	*p*
Eczematous dermatitis	139 (22,6)	68 (22,8)	26 (20,8)	233 (22,4)	*0.91**
Fungal infections	108 (17,5)	33 (11,1)	9 (7,2)	150 (14,4)	***0.001****
Infestations	60 (9,7)	32 (10,7)	13 (10,4)	105 (10,1)	*0.91**
Genaralized pruritus	26 (4,2)	32 (10,7)	14 (11,2)	72 (6,9)	***0.00****
Premalignant skin lesions	29 (4,7)	29 (9,7)	9 (7,2)	67 (6,4)	***0.014****
Papulosquamous diseases	45 (7,3)	10 (3,4)	6 (4,8)	61 (5,9)	*0.06**
Viral infections	35 (5,7)	17 (5,7)	4 (3,2)	56 (5,4)	*0.462**
Benign skin neoplasia	38 (6,2)	10 (3,4)	7 (5,6)	55 (5,3)	*0.202**
Urticaria	20 (3,2)	9 (3)	2 (1,6)	31 (3)	*0.614**
Malign skin neoplasia	10 (1,6)	8 (2,7)	12 (9,6)	30 (2,9)	***0.00****
Callus	16 (2,6)	8 (2,7)	2 (1,6)	26 (2,5)	*0.786**
Xerosis cutis	12 (1,9)	8 (2,7)	4 (3,2)	24 (2,3)	*0.612**
Acne and acneiform skin lesions	16 (2,6)	5 (1,7)	0 (0)	21 (2)	*0.15**
Bacterial infections	11 (1,8)	5 (1,7)	3 (2,4)	19 (1,8)	*0.873**
Immune-rheumatic diseases	9 (1,5)	5 (1,7)	1 (0,8)	13 (1,3)	*0.92***
Cutaneous ulcers	3 (0,5)	5 (1,7)	4 (3,2)	12 (1,2)	***0.021****
Drug eruptions	4 (0,6)	2 (0,7)	1 (0,8)	7 (0,7)	*1***
Disorders of skin appendages	5 (0,8)	1 (0,3)	0 (0)	6 (0,6)	*0.719***
Cutaneous lymphomas	5 (0,8)	0 (0)	0 (0)	5 (0,5)	*0.245***
Mucous membrane disorders	2 (0,3)	2 (0,7)	0 (0)	4 (0,4)	*0.761***
Vesiculobullous diseases	2 (0,3)	1 (0,3)	1 (0,8)	4 (0,4)	*0.587***
Others	21 (3,4)	10 (3,4)	7 (5,6)	38 (3,7)	*0.422**

**Pearson's chi-square test, **Fisher' exact test. Significant P values are shown in bold.*

Table 3. Distribution of skin diseases according to season.

	Winter n (%)	Spring n (%)	Summer n (%)	Autumn n (%)	Total n (%)	*p*
Eczematous Dermatitis	46 (19,7)	41 (17,6)	65 (27,9)	81 (34,8)	233 (100)	*0.127**
Fungal infections	31 (20,7)	37 (24,7)	40 (26,7)	42 (28)	150 (100)	*0.636**
Infestations	20 (19)	19 (18,1)	28 (26,7)	38 (36,2)	105 (100)	*0.3**
Genaralized pruritus	21 (29,2)	14 (19,4)	13 (18,1)	24 (33,3)	72 (100)	*0.377**
Premalignant skin lesions	20 (29,9)	16 (23,9)	10 (14,9)	21 (31,3)	67 (100)	*0.158**
Papulosquamous diseases	19 (31,1)	11 (18)	19 (31,1)	12 (19,7)	61 (100)	*0.095**
Viral infections	15 (26,8)	15 (26,8)	10 (17,9)	16 (28,6)	56 (100)	*0.274**
Benign skin neoplasia	7 (12,7)	19 (34,5)	15 (27,3)	14 (25,5)	55 (100)	*0.058**
Urticaria	5 (16,1)	4 (12,9)	15 (48,4)	7 (22,6)	31 (100)	***0.035****
Malign skin neoplasia	3 (10)	3 (10)	8 (26,7)	16 (53,3)	30 (100)	***0.022****
Callus	6 (23,1)	6 (23,1)	6 (23,1)	8 (30,8)	26 (100)	*0.99**
Xerosis cutis	7 (29,2)	7 (29,2)	4 (16,7)	6 (25)	24 (100)	*0.542**
Acne and acneiform skin lesions	8 (38,1)	5 (23,8)	5 (23,8)	3 (14,3)	21 (100)	*0.238***
Bacterial infections	4 (21,1)	6 (31,6)	4 (21,19	5 (26,3)	19 (100)	*0.778***
Immune-rheumatic diseases	4 (30,8)	2 (15,4)	4 (30,8)	3 (23,1)	13 (100)	*0.81***
Cutaneous ulcers	4 (33,3)	1 (8,3)	4 (33,39	3 (25)	12 (100)	*0.586***
Drug eruptions	3 (42,9)	3 (42,9)	1 (14,3)	0 (0)	7 (100)	*0.084***
Disorders of skin appendages	0 (0)	2 (33,3)	2 (33,3)	2 (33,3)	6 (100)	*0.646***
Cutaneous lymphomas	1 (20)	3 (60)	1 (20)	0 (0)	5 (100)	*0.139***
Mucous membrane disorders	3 (75)	0 (0)	0 (0)	1 (25)	4 (100)	*0.083***
Vesiculobullous diseases	1 (25)	0 (0)	1 (25)	2 (50)	4 (100)	*0.9***
Others	6 (15,8)	10 (26,3)	13 (34,2)	9 (23,7)	38 (100)	*0.33**

**Pearson's chi-square test, **Fisher' exact test. Significant P values are shown in bold.*

The most common five dermatologic diseases in all patients were contact dermatitis (11.16%), scabies (8%), tinea ungium (6.8%), actinic keratosis (6.1%), and generalized pruritus (6.1%), respectively. The five most frequent diseases in women were contact dermatitis (11.7%), scabies (7.9%), tinea ungium (7.9%), actinic keratosis (6.4%) and psoriasis (4.7%). In men, they were contact dermatitis (12.7%), scabies (8.1%), generalized pruritus (6.2%), actinic keratosis (5.8%), and tinea ungium (5.6%).

Discussion

With the global average life expectancy on the rise, it has become increasingly important to identify health issues in geriatric patients, facilitate early diagnosis, and provide appropriate treatment. These efforts not only enhance their quality of life but also contribute to reducing healthcare expenses (4). Based on data from 2020, individuals aged 65 years and older account for 9.3% of the global population and 9.5% of the population in Turkey (3,5). In this particular study, it was observed that individuals aged 65 and older comprised 12.85% of the patients who visited the outpatient clinic in the past year.

The study identified the five most prevalent skin conditions as eczematous dermatitis, fungal infections, infestations, generalized pruritus, and premalignant skin lesions. A similar study conducted by Yalçın et al. in 2006 reported a similar ranking, with eczematous dermatitis, fungal infections, pruritus, bacterial infections, and viral infections being the most common (6). In another study from eastern Turkey in 2012, the most common skin diseases in this age group were eczematous dermatitis, fungal infections, pruritus, urticaria-angioedema, and bacterial infections (7). Furthermore, a study conducted in 2017, which included 7,092 patients, observed a similar pattern with eczematous dermatitis, fungal infections, pruritus, premalignant and malignant skin lesions, and xerosis cutis being the most prevalent conditions (8). It is notable that eczematous dermatitis and fungal infections consistently emerged as the two most common diseases across all these studies, including the present one.

Various studies have reported that the incidence of eczematous dermatitis in the elderly ranges from 17.1% to 37.7% (6-10). In this study, the frequency of eczematous dermatitis was found to be 22.4%. Contact dermatitis was identified as the most common type of eczematous dermatitis in this study as well as in the other three studies (6-8). Aging brings about several changes in both the innate and adaptive immune systems. Referred to as "immunoaging," these changes include increased receptor density in immune cells, higher numbers of memory T cells, elevated production of proinflammatory cytokines such as interleukin (IL)-1, IL-2, IL-6, IL-12, IL-15, IL-18, IL-22, IL-23, tumor necrosis factor (TNF)-α, and interferon (IFN)-γ, reduced phagocytosis by neutrophils, diminished numbers of naive T cells, decreased production and function of B cells, as well as dysfunction of monocytes and macrophages. These alterations contribute to decreased resistance against infectious diseases, a predisposition to cancer development, and an increased susceptibility to autoimmune diseases among elderly patients. The combination of immunoaging and skin dryness, along with a decline in skin barrier function, increased transepidermal water loss, reduced epidermal cell regeneration, thinning of the epidermis, prolonged exposure to allergens, and diminished elimination of allergenic substances, creates a propensity for the development of contact dermatitis in the elderly (4). Similar to the findings of Bilgili et al. and Yaldiz, this study also observed a significantly higher prevalence of eczematous dermatitis in male patients compared to females. This difference could be attributed to the fact that males in this age group tend to spend more time outdoors, leading to increased exposure to allergens and irritants. Additionally, they may not adhere as strictly to personal care recommendations, such as regular use of moisturizers.

Fungal infections ranked as the second most prevalent skin condition in this study, consistent with the findings of the other three studies. While tinea pedis was reported as the most common fungal infection in the other studies, the most frequent type in this study was tinea ungium, followed by tinea pedis. Apart from immunoaging, the increase in fungal infections with age can be attributed to factors such as thinning of the epidermis, decreased barrier function, compromised skin integrity that makes it susceptible to minor trauma, and a higher incidence of concomitant diseases like DM and peripheral vascular disease (11). In this study, it was found that 78.3% of patients had at least one systemic disease, and 25% of the patients had DM. These underlying systemic conditions may contribute to the higher occurrence of fungal infections in the geriatric population.

In this study, a noteworthy deviation from other studies was observed, as generalized pruritus was replaced by scabies infestation. Additionally, when examining the subgroups of diseases, it was found that scabies ranked as the second most common skin disease after contact dermatitis. It has been reported that the incidence of scabies

in Turkey experienced a significant increase, with a 7-fold rise in 2018 and a further 30-fold increase in 2019 compared to the numbers in 2017 (12). This surge in scabies cases in our country in recent years explains why infestation, which was not among the top five skin diseases in previous studies, emerged as the third most common skin disease in this study.

Pruritus is a commonly experienced symptom among the elderly. The incidence of pruritus in the elderly varies between 2% and 14.2% according to various studies (6-10). In this study, the incidence of generalized pruritus was found to be 6.9%. Dry skin is the leading cause of pruritus in the elderly. Alongside dryness, systemic comorbidities such as DM, thyroid disease, chronic liver and kidney disease, malignancies, anemia, multiple drug usage, and stress are major contributors to pruritus in this age group (13). The study also identified that generalized pruritus was significantly less common in the 65-74 age group compared to the other two age groups, suggesting that the incidence of pruritus increases with age.

The risk of developing skin cancer increases as individuals age. Factors such as immunoaging, decreased DNA repair capacity, cumulative lifetime exposure to carcinogens, and increased ultraviolet (UV) exposure contribute to this heightened risk (1). In various studies, the frequency of premalignant and malignant skin lesions among individuals over the age of 65 has been reported to range from 1.2% to 9.7% (6-8, 10). In this particular study, the incidence was found to be 9.3%. Consistent with the understanding that the risk of skin cancer increases with age, this study revealed that the occurrence of premalignant lesions was significantly higher in the 74-85 age group compared to the 65-74 age group. Furthermore, malignant skin lesions were significantly more prevalent in the age group exceeding 85 years compared to the other two age groups.

Among elderly patients, leg ulcers and pressure ulcers resulting from circulatory failure are the most frequent causes of cutaneous ulcers. The aging process leads to a decrease in skin regeneration and impaired wound healing. Additionally, systemic conditions like arterial and venous insufficiency, neuropathy, DM, chronic kidney disease, malignancy, immobility, and malnutrition contribute to the development of ulcers on the skin (14,15). In this study, it was observed that the incidence of cutaneous ulcers was higher among patients in the older age group. This finding aligns with the understanding that the risk of developing ulcers increases as individuals age.

In this study, it was observed that patients with urticaria tended to seek medical attention more frequently during the summer, while patients with malignant skin tumors were more commonly detected in the autumn. The higher incidence of malignant skin tumors in the fall can be attributed to the seasonal pattern of patient visits, with autumn being the most common time for seeking medical care. Regarding the seasonal distribution of urticaria, there are limited studies available in the literature. One study reported a higher frequency of urticaria during the summer, while another study indicated a higher frequency during winter (16,17). In the current study, the increased occurrence of urticaria in the summer could be attributed to hazelnut harvesting, which takes place during this season in the region. Furthermore, people may have increased exposure to outdoor allergens due to spending more time in fields and gardens during the summer. It is important to acknowledge the limitations of the present study, including its single-center nature and retrospective design. However, a notable strength of the study is its large sample size.

Conclusion

This study offers valuable data on the prevalence of dermatologic diseases in elderly patients. A notable finding in this study, which distinguishes it from previous research, is the high incidence of scabies among the elderly population. This highlights the increasing occurrence of scabies in our country in recent years. Consequently, elderly patients presenting with itching symptoms should be screened for scabies.

As the elderly population continues to grow worldwide, there is an increasing focus on understanding and addressing the specific diseases and healthcare needs of this age group. As demonstrated in this study, although the most common skin diseases in elderly patients may not directly affect life expectancy, they significantly impact the quality of life. Preventive measures play a crucial role in reducing the incidence of these diseases, and it is essential to provide necessary education to the elderly, caregivers, and primary care physicians. This education should cover disease prevention, as well as early diagnosis and treatment, in order to improve outcomes and maintain a higher quality of life for elderly individuals.

Declarations

Funding

No funding.

Conflicts of Interest

The author has no conflict of interest to disclose.

Ethics approval

The study was conducted according to the Helsinki Declaration for Ethical Principles of Research. Approval was obtained from the Ethics Committee linked to Giresun University Faculty of Medicine (approval number: 12, date: 07.02.2023).

Availability of Data and Material

The datasets used and/or analysed during the current study are available from the corresponding author on reasonable request.

Authors' Contributions

SK: Design, data collection, analysis and writing.

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