

# Palliative Care Resulting in the Recovery of an İschaemic, Ulcerated Foot With Indications for Amputation: Case Report

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## ABSTRACT

**Aim:** The home healthcare services and palliative care services are co-ordinated in our hospital by the Family Medicine Department. With this case presentation, it was aimed to emphasise the importance of co-ordination of the palliative care unit with home healthcare services in the treatment and care of selected patients.

**Case:** A 78-year old female was evaluated by the home healthcare services because of a wound in the left foot which had not recovered for 2 years and was then admitted to the palliative care unit with an infected wound 4 x 5 cm in the distal of the left ankle extending laterally. Amputation of the injured foot had been recommended to the patient but she had refused that option. At the end of the 3rd week of palliative care, the foot wound was seen to have improved and the patient was discharged with follow-ups to be made by home healthcare services.

**Discussion:** Palliative care is a branch which aims to help patients who are not fully recovered because of a chronic disease or who require end-of-life support. In the case presented here, a 78-year old female patient was monitored by home healthcare services but routine dressing changes were not applied and further treatment was required. The patient was referred to the palliative care unit, was admitted and recovered with the appropriate treatment.

**Keywords:** Palliative care, home healthcare, coordination, wound

## AMPUTASYON ENDİKASYONU OLAN İSKEMİK ÜLSERLİ AYAĞIN PALYATİF BAKIM SONUCU İYİLEŞMESİ: OLGU SUNUMU

### ÖZET

**Giriş:** Palyatif bakım servisi ve evde sağlık hizmetlerinin koordineli bir şekilde çalışması hastaların takip ve tedavisinde önemli rol oynamaktadır. Bu olgu sunumu ile seçilmiş hastalarda birimler arasındaki koordinasyonun tedavideki etkisini göstermeyi amaçladık.

**Olgu:** Evde sağlık hizmetlerinin evinde ziyaret ettiği 78 yaşında bayan hastanın sağ ayakta 2 yıl devam eden kronik yarası mevcut. Yara sağ ayak bileği laterale doğru uzanan, 4X5 cm. genişliğinde enfekte görünümülü idi. Amputasyon kararı verilmesine rağmen hastanın bu durumu reddettiği öğrenildi. Palyatif bakım servisinde 3 haftalık takip ve tedavisi sonrası yarası düzeldi. Evde sağlık hizmetlerinin kontrolünde olacak şekilde taburcu edildi.

**Tartışma:** Palyatif bakım destek ihtiyacı olan kronik hastaların hayat kalitesini artırmayı amaçlar. Evde sağlık hizmeti ile palyatif bakım servisi arasındaki koordinasyonun hastaların takip tedavisindeki başarıyı artırmaktadır.

**Anahtar sözcükler:** Palyatif bakım, evde sağlık hizmetleri, koordinasyon, yara

**P**alliative care is defined as the care given with a biopsychosocial approach to improve the quality of life of patients with life-threatening or serious diseases (1). In addition to pain management, nutritional support and care education, psychological and social support are also provided to the patients when necessary (2). In our hospital, the home healthcare services and the palliative care services are co-ordinated by the Family Medicine Department. Weekly visits were made with all home healthcare service staff in the region for a training in the palliative care unit. Thus, the progress of therapy for patients was kept and provided. The case presented here emphasises the importance of the co-ordination of palliative care services with home healthcare services in the treatment of selected patients.

### Case

A 78-year old female was admitted to the palliative care unit after consultation with interactive photographs of a wound on the foot which had been evaluated by the home healthcare services team. The patient, who had chronic, ischaemic heart disease and using metoprolol 50 mg/day, amlodipine 10 mg/day, candesartan hydrochlorothiazide 16-12.5 mg/day and acetylsalicylic acid 100 mg/day. Her fasting blood sugar levels were between 100-150 mg/dl and HbA1c was 6.2% and no medication was being taken for diabetes. She was living alone and in a good general condition, co-operative and mobile. The patient could partially manage her own personal care, but had a wound on the left foot which had persisted for 2 years. The wound of approximately 4 x 5 cm in size in the distal of the left ankle, extending laterally, was ulcerated, infected and had discharged (Figure 1). The patient had been protecting the foot with the suppurating wound in a plastic bag. Antibiotic therapy had been given sporadically and dressings had been changed during the home healthcare services visits by the homecare physician, but the leakage had not recovered. The patient was then seen by orthopedics and plastic surgery departments and amputation was recommended for the wounded foot but she did not accept it and was referred to the palliative care unit and hospitalized for advanced wound care.

The laboratory test results were normal and on the Doppler ultrasound of the venous system, a reflux discharge was observed at the parvo-popliteal junction along the valsalvae. On the left arterial colour Doppler ultrasound, post-stenotic, monophasic discharge was seen in the distal popliteal artery, slight monophasic discharge in the tibialis anterior-posterior at ankle level and in the



**Figure 1.** Wound before treatment

dorsalis pedis arteries, together with a widespread calcified plaque. A culture was taken from the wound, then the infected, necrotic parts were debrided. As empirical antibiotic therapy, ampicillin sulbactam 4 x 1 gr was started. As *Pseudomonas aeruginosa* proliferation was determined/detected in the culture, the antibiotic treatment was continued with levofloxacin 50mg 1 x 1. The wound dressing was being changed daily. To assist epithelialisation, Bactigras was applied (Leno/perforated gauze soaked in soft paraffin containing 0.5% chlorhexidine acetate). Upon the recommendation of the cardiovascular surgeon, the patient was administered with ilomedin (iloprost trometamol) 1 x1 IV in 150ml isotonic over 3 hours. At the end of 3 weeks, the wound in the foot had recovered (Figure 2) and the patient was discharged from the hospital to be followed up by home healthcare services.

### Discussion

It is known that with the current increase in life expectancy, the proportion of elderly in the general population has increased and these rising numbers are predicted to



**Figure 2.** Wound after treatment

continue. This is also associated with an increase in chronic diseases causing disability and leading to death. In Turkey, 7.3% of the population are aged over 65 years, and of these, 12.3% are disabled (3). Many patients with chronic diseases who cannot leave their homes, because of some restrictions, require (need) experienced care at home, as do those with mental or physical disabilities (4). In recent years, the increasing cost of healthcare has changed the role of hospitals and the need of health care (for) these individuals with a labour force outside the family and the use of technology has become a topic of importance (5,6).

In the case presented here, a 78-year old female patient was monitored by home healthcare services but routine dressing changes were not applied and further treatment was required. The patient, who was referred to the palliative care unit, was admitted and recovered with the appropriate treatment. In our hospital, the home healthcare services and the palliative care unit are co-ordinated by the Family Medicine Department. Hospitalized patients in the palliative care unit were evaluated by other home

healthcare services staff in the region for training at weekly visits. With the case presented here, it was aimed to emphasise the importance of the co-ordination of palliative care services with home healthcare services in the treatment of selected patients.

The management of home healthcare services in Turkey was published by the Ministry of Health in 2005. Then, guidelines on the principles and national applications of home healthcare services came into force in 2010 and in this context it was aimed to provide an effective, productive, pleasant and people-centred healthcare service at homes within a family environment following the principles of equality and justice for those individuals in need (7,8). Patients who require monitoring at home because of disability or who are elderly, bedridden or in similar circumstances are able to benefit from this service. The legal regulations were then made for the establishment of palliative care units in hospitals and the first comprehensive palliative care centre was opened in Ankara Ulus State Hospital (1).

Rather than incurring a lengthy hospital stay and for reasons other than being sick, home healthcare service is given to meet the care needs of an individual in their own environment (3). Provision of the necessary long-term healthcare to these individuals creates problems for both in-patient institutions that attempting to meet these needs and for the individuals and their families.

Palliative care is a branch which aims to help patients who are not fully recovered because of chronic disease or who require end-of-life support. At the point of starting curative treatments, symptomatic and relieving approaches have a significant place within palliative care. The World Health Organisation (WHO) recommends the integration of healthcare services at all stages with a weighting given to primary care. The healthcare system integration of palliative care is accepted as a significant indicator of end-of-life care quality (9).

Community-based palliative care, especially together with the application of healthcare services at home, is associated with a better symptom control, increased patient satisfaction, fewer presentations at (admissions to) the hospitals and lower costs (10-12). Not every family may be able to care for a terminal stage family member, or if they do undertake the care, may later experience their own physical or psychological deterioration. When the patient's symptoms cannot be sufficiently controlled (pain, nausea,

dizziness, vomiting, respiratory problems, discomfort) or when the patient deteriorates because of inadequate care at home or there is nobody in the family to provide care or when the home healthcare service personnel cannot cope with psychosocial and mental problems of the patient, the in-patient palliative care institutions, come into operation (13).

Palliative care service is accepted when there is no possibility of care to be given/provided at home or the symptoms related to the disease cannot be brought under control by the home healthcare services. When the problem, which has caused the patient to be admitted to the palliative care unit, is brought under control, the patient will be/can be discharged to allow a return to a familiar environment (13).

The collaboration of the palliative care units with the home healthcare services increases the efficiency of the service. When there is evidence that close monitoring of the patient would contribute to the treatment, rather than remaining at home, the patient can be admitted to a palliative care unit for a period of time then later it will be appropriate again to continue with the home healthcare services. During the period of hospitalisation, training given to those undertaking the care at homes and increasing the co-ordination will provide an interactive solution to the patient's problems.

In the model applied in Germany, the co-ordination of the home healthcare services provides the possibility of hospitalisation when necessary during the course of a disease or for the treatment of terminal stage patients. The family physician monitoring the disease is responsible for making all the necessary interventions for palliative care when the patient is at home. To meet the knowledge requirements of healthcare personnel working in the area of home care, training on palliative care is given within the service at regular intervals. (13).

The palliative care units in Turkey have been partially implemented on the model (Table 1) formed in the

guidelines prepared based on examples from around the world (14). According to this model, education and training related to treatment and care at home are provided to relatives of the patient and carers by an experienced team in patient care at home, and psychosocial support is provided for the family of the patient. The family physician plays a role in the follow-up and treatment of the patients and their families and in the referral to a palliative care unit or centre according to the course of the disease and requirements (14).

**Table 1.** Palliative care model

1. Institutions for in-patient treatment
  - Comprehensive palliative care centre (CPCC, 3rd stage)
  - Palliative care centre (PCC, 2nd stage)
  - Palliative care unit (PCU, 1st stage)
2. Home care programs (HCP, 1st stage)
3. Family physician (FP 1st stage)
4. Hospice

Palliative care and home healthcare services are part of the structure of the Family Medicine Department at our university and the/our service is provided in an integrated manner with other home healthcare service units in the region. Evaluation of the hospitalised patients in the palliative care unit, weekly visits with home healthcare service units and in-service training are provided. Patients that are seen to be suitable for the services by family physicians can be referred.

As seen in the case presented in this paper, the importance must be stressed on the co-ordination of the palliative care unit and the home healthcare services in respect of the care and treatment of selected patients. Palliative care requires a multi-disciplinary and inter-disciplinary approach. A multi-disciplinary approach to care is essential and requires units known to the patient, such as the home healthcare unit or the family physician, within the team and must include a team leader to co-ordinate the whole team. The most appropriate discipline for this is Family Medicine, which demonstrates an integral and comprehensive biopsychosocial approach to the patient.

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