Literature Review

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Oral Palliative Care: A Review

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Abstract

Palliative care is active comprehensive care for patients whose illness does not respond to treatment. Palliative care specialists deal with patients in the terminal stage of illness or aging. Palliative care is an approach that encompasses procedures to relieve pain, distressing symptoms and maintain function as much as possible in the sick or very elderly, including in life-threatening illnesses. The field of palliative care is considered the most interdisciplinary of all medical specialties.

Oral care is important for all people and should be considered as a part of daily medical care. Palliative care dentistry focuses on the treatment of sick patients where the oral cavity is directly or indirectly affected by the disease. Regular examinations and oral hygiene should be started early in palliative care patients to optimize comfort and prevent more serious complications. The dentist should help to reduce pain from the oral cavity and ensure sufficient dental function, must establish and treat the main complaints, propose an oral hygiene plan to the patient, medical staff or relatives.

Palliative care patients and their caregivers often neglect oral problems and the need for oral hygiene, resulting in many daily difficulties that include difficulty chewing, dry mouth, risk of infection and inflamations, bad breath and nutrition, changes in taste, which ultimately impair their quality of life.

Key words: *Geriatric dentistry, oral palliative care, oral health*

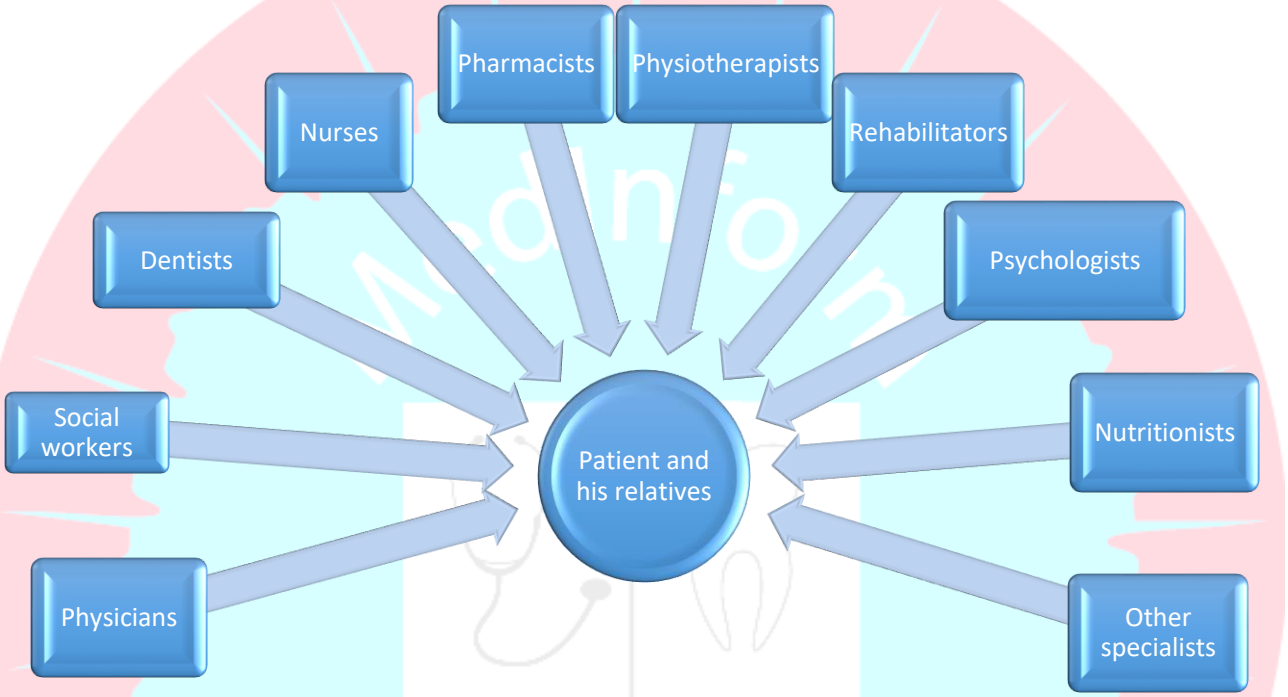
Introduction

The World Health Organization defines "palliative care" as active comprehensive care for patients whose illness does not respond to treatment. In this type of care medical specialists deal with patients in the terminal stage of illness or aging. Palliative care is an approach that encompasses procedures to relieve pain, distressing symptoms and maintain function as much as possible in the sick or elderly, including in life-threatening illness (cancer, chronic heart failure, chronic obstructive pulmonary disease, cognitive impairment, physical restrictions, etc.)(1).

The field of palliative care is considered the most interdisciplinary of medical specialties, as it includes spiritual issues in addition to medical ones. In addition to doctors, nurses, the medical team of the palliative

unit consists of psychologists, physiotherapists, rehabilitators, nutritionists, priests. However, dental professionals are often absent. Oral changes in these patients are among the most common problems (1). A major reason for the involvement of a dental practitioner is that oral health and oral hygiene are important for good general health. Having problems in the mouth often affects the whole organism. Oral treatment may not always be vital and effective, but it should focus on improving the patient's quality of life (2).

Fig.1 Palliative team



Aim

The purpose of this article is to describe the field of oral palliative care.

Materials and Methods

The present review was performed to characterize oral palliative care. An electronic search was conducted about what is published in data bases: PubMed, Google Scholar, Research Gate; some books were also included.

Results

Palliative care dentistry focuses on the treatment of terminally ill patients in whom the oral cavity is directly or indirectly affected by the disease and its task is to relieve symptoms and prevent infections (3; 4). Palliative care includes more than simple treatment of the patient, as the care is directed not only to the patient, but also to his relatives. People in palliative care may have many oral problems such as dry mouth, difficulty eating, halitosis, neglected hygiene, difficulty swallowing, etc. that need to be addressed; oral health plays an important role in improving the quality of life. Poor oral health can lead to other life-

threatening conditions such as bacteremia, brain abscesses, endocarditis, aspiration pneumonia, malnutrition, etc. (5). Dentists play an important role in the multidisciplinary palliative team. Oral health problems (ulcers, mucositis, pulpitis, periodontitis, abscesses) have a negative impact on general health and quality of life and can be highly debilitating. Patients with general diseases are at increased risk of developing oral complications (6).

The interdisciplinary palliative care team should include a dentist because other team members may not be aware or know how to deal with oral problems. The palliative care team should not become prognostic about life expectancy, as this may influence the choice of treatment (7). An incorrect prognosis may lead the dentist to change comfort care to more complex or simplified care. The dental practitioner should know that their main goal is to control pain and increase comfort. The oral cavity is extremely important for the palliative care patient. It provides an important pathway for nutrition, medication, speech, and social contact.

In the absence of pain, most patients are rarely willing to seek treatment for oral problems themselves. Given the serious effects of untreated oral diseases on the whole organism, the decision to improve oral health should not be based solely on the patient's self-assessment or the presence of pain (8).

The most common oral diseases in adults in palliative care are:

- traumatic injuries (maxillofacial fractures, traumatic lesions);
- diseases due to insufficient oral hygiene (gingivitis, periodontitis, root caries);
- diseases typical of the elderly with late/undiagnosed diseases (precancerous and oncological diseases);
- diseases typical of elderly people undergoing psychological distress (oral lichen planus) (9).

Common problems in palliative care patients are:

Dry mouth

Xerostomia, or dry mouth, is common in patients receiving radiotherapy to the head and neck, with a prevalence of about 80% (10), and in those receiving chemotherapy, the prevalence of xerostomia is estimated to be about 50% (11). Many medications prescribed to these patients, such as analgesics, sedatives, antidepressants, anxiolytics, neuroleptics, anticholinergics, cause dry mouth (12). Decreased fluid intake, diarrhea, fever, mouth breathing, vomiting and poor nutrition can lead to dehydration.

Infections

A common condition is oral candidiasis. In palliative care patients, the incidence is estimated at 75% (13). The condition can vary in appearance from redness to a thick, white, scraping plaque. Predisposing factors for fungal infection are poor oral hygiene, hyposalivation and xerostomia, diabetes, antibiotic intake, weakened immune system and poor nutrition. The condition can cause pain and difficulty swallowing and chewing.

Herpes simplex infection may also occur more often, especially with fatigue, cachexia, lethargy, or another infection.

There are many anaerobic microorganisms in the mouth. Poor oral hygiene can lead to infections. Metronidazole (400 mg every 8 hours for 3 to 7 days or longer if needed) is recommended to control anaerobic infection and malodor.

Mucositis and stomatitis

Oral mucositis is a painful inflammatory condition that is thought to occur in 80% of patients undergoing chemotherapy and/or radiotherapy. In dehydrated oral mucosa of immunosuppressed patients, the condition can cause ulcers. Mucositis can make normal eating impossible.

The oral cavity is affected by chemotherapy and radiotherapy to varying degrees. Chemotherapy affects mitotically active cells. Oral tissues with high mitotic potential are affected by such treatment, resulting in tissue atrophy. Younger patients are at greater risk of tissue atrophy than older ones because they have higher mitotic activity (14). Radiotherapy affects the oral cavity by sclerosing the small vessels that vascularize the oral tissues.
Palliative care and treatment of mucositis, opportunistic oral infections, pain, and other oral complications associated with the treatment of neoplasia should be provided as needed. It is essential that the dental practitioner provides the individualized care needed for this vulnerable population. Oral health professionals should search purposefully preneoplasias and neoplasias (15).

Loss of masticatory function

Most often, palliative care patients have reduced masticatory function. The reasons for this may be:
• Multiple extracted teeth,
• Abraded occlusal surfaces, loss of occlusal relief, at bite height,
• Weakening of the masticatory muscles,
• Dry mouth, lack of saliva,
• Difficulty chewing with removable dentures.

Bad nutrition

Problems in the oral cavity can significantly affect the ability to eat normally. As a result, patients' bodies weaken and they become more prone to anorexia or cachexia. Medications such as psychostimulants, anti-depressants or chemotherapy also help poor nutrition. Malnutrition itself unlocks additional complications such as depression, pain, stomatitis, dysphagia, nausea. 70% of terminally ill patients suffer from anorexia (16). Malnutrition occurs in all age groups, but its prevalence is significantly higher among people over 65 years of age. About 33% of patients in hospitals and nursing homes are at risk of malnutrition, and the elderly living independently at home are particularly vulnerable (17).
For feeding problems, high-energy meals are prescribed. The food served should be as appetizing as possible, the patients' favorite foods should be prepared, and their preferences should be taken into account. High-calorie shakes are prepared to promote nutrition and protect the mucous membrane. Pharmacologic appetite stimulants may also be prescribed. For patients with xerostomia, meals should be moist and soft so that they are easier to swallow (18).

Dysphagia

Difficulty swallowing can be oropharyngeal or esophageal. If the patient has bad dentition, lack of saliva, insufficient muscle function, pain from ulcers, herpes or fungal infection, removable dentures, multiple caries, periodontitis, she or he cannot form a good bite, which leads to swallowing problems (18).
Painful swallowing (odynophagia), sensation of a lump in the throat (Globus pharyngis), nausea and vomiting are also common complaints in these patients (17, 18).

Bad breath

Studies have shown a distinct increase in bad breath values with advancing age in healthy individuals. With neglected oral hygiene, the prevalence and extent of bad breath are even
higher (19).

Changes in taste

Patients may experience changes in taste due to medications or the reduced amount of saliva. There is a decrease in the number of taste receptors, which also leads to a lack of appetite. Maintaining a healthy diet is essential, and a nutritionist can help. The diet should be adapted according to the patient. Foods and drinks that are pleasant and look good should be given. If patients have multiple meals during the day, basic oral hygiene measures may need to be performed more frequently (18).

Drooling of saliva outside the mouth

It is caused by difficulty swallowing, particularly in neurodegenerative diseases, Parkinson's disease and multiple sclerosis(18).

Depression

Depression can be quite common among palliative care patients. Estimated prevalence ranges from 24% to 70%. It leads to a reduced quality of life (20).

The most common oral conditions are xerostomia, oral candidiasis, dysphagia, followed by mucositis, orofacial pain, altered taste and ulcers (13).

BEHAVIOR

- Oral care is most effective when the patient is in a semi-upright position to avoid choking or aspiration of liquids, bacteria or food.
- When such positioning is not possible, care should be taken to avoid collection of fluids in the oral cavity or aspiration should be used.
- Taking care of the soft tissues in the mouth is just as important as taking care of the teeth.
- It is important to keep the teeth and mucosa clean by removing plaque and food debris.
- Tongue brushing is also important to reduce tongue plaque, microorganisms, halitosis.
- Frequent fluid intake is recommended.
- In case of dryness, it is good to apply a water-based gel on the soft tissues in the mouth after performing oral hygiene procedures. When applying a new portion of lubricants, the remnants of the old one must be removed.
- Recommendations for reduced intake of sweet foods and drinks between meals are important.
- For malnourished patients, it is good to seek help from a nutritionist.
- Encourage and support family members to participate in oral care.
- Drug history is extremely important, as many drugs can affect the oral environment:
  - ✓ opioids, diuretics and anticholinergics increase dry mouth
  - ✓ steroids increase the risk of candidiasis
  - ✓ bisphosphonates increase the risk of osteonecrosis of the jaw.
- Providing comfort and reducing pain is important.
- Removal of dentures before examination or oral care.
- Active search for signs of dryness, ulcers, infections, caries, preneoplasia.
- Referral to a dentist with the patient's consent for persistent oral symptoms or if more than half a year has passed since the patient was seen by a dentist.
- Patients undergoing chemotherapy and/or radiotherapy need special monitoring before, during and after treatment (18, 21).

Cleaning the teeth and oral mucosa

The goal of mucosal cleansing in palliative care is to remove food debris or exfoliated cells, prevent infection, reduce pain. It is recommended to brush teeth with a soft brush and toothpaste without sodium lauryl sulfate (22). Oral care must be specifically tailored to the intended purpose. Daily use of bactericidal agents should be avoided in healthy individuals, but in palliative care such products may be useful in removing cells, fungi, bacteria, food debris and thick saliva. Electric toothbrushes were originally used precisely for such groups of patients, as they have reduced manual abilities.

Cleaning with 0.5% hydrogen peroxide, saline or clean water is also suggested. The application of diluted physiological solution is useful and sufficient in cases where there are no clear signs or marked presence of infection, adhesions.

Care of removable dentures

For patients with dentures, all cleaning and maintenance rules must be followed. In palliative care, it is important to assess whether dentures are safe to wear, check for cracks, sharp edges and missing teeth regularly. In emaciation, cachexia, dentures may become uncomfortable due to atrophy of the prosthetic field (18).

Discussion

There is consensus on the importance of oral care in palliative care patients. This area has received little scientific attention, with lack of scientific evidence showing the benefits of oral palliative care products (23). Oral palliative care is at the interface between dentistry and medicine, and both disciplines have a shared responsibility for treatment.

The need for interdisciplinary collaboration is particularly evident when prescribing treatment with adverse oral effects. Oral care is a necessary daily responsibility, just like any other type of medical care. There are many challenges in providing care for cachexic, terminally ill, debilitated patients. Oral problems affects the whole organism (1).

The dentist should aim to reduce pain from the oral cavity and ensure sufficient dental function. The dental physician must establish and treat the main complaints, propose an oral hygiene plan to the patient, medical staff or relatives to ensure the best quality of life for the patient. Suggestions for treatment of oral problems should be tailored to the health status of each one, taking into account the condition of the patient and/or his family, the possibility of assisting him in the care of the oral cavity.

Conclusion

Palliative care patients and their caregivers often neglect oral problems and the need for oral hygiene, resulting in many daily obstacles that include difficulty chewing, dry mouth, risk of infection, bad breath, which ultimately impairs their quality of life (24).

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