

Oral Health Management in Palliative Care..

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ABSTRACT

Palliative dental care, an emerging field of dentistry, highlights offering oral care for those suffering from life-threatening conditions. Dentists can play an important role in the management of these individuals by offering comprehensive proactive comfort care of the oral cavity. Proper functioning of the oral cavity is critical to the patient's well-being. As a result, offering complete, active comfort for the patient should prioritize pain relief and infection control in the oral cavity. Paying attention to such details may minimize not only the microbial burden of the mouth but also the danger of discomfort and oral illness. Palliative care is a multidisciplinary approach in which dentists can act as 'healing hands' in pain management, social, psychological, and spiritual issues. This article discusses some of the most frequent issues observed in palliative care dentistry for individuals with terminal cancer, as well as the recommended therapy for these issues..

Keywords: palliative care; quality of life; oral health; pain management; multidisciplinary approach.

INTRODUCTION

Palliative dentistry care, an important component of holistic healthcare, attempts to relieve pain, restore oral function, and improve the quality of life for patients suffering from severe or terminal diseases. The field of palliative dentistry has been described "as the study and management of patients with active, progressive, far-advanced disease in whom the oral cavity has been compromised either by the disease directly or by its treatment; the focus of care is quality of life".[1]

This method includes not just providing care for the patient's bodily requirements, but also for the patient's and family's spiritual needs. This article discusses some of the most recurrent difficulties observed in palliative care dentistry in individuals

with terminal cancer, as well as the recommended therapy for these disorders.

Palliative Dental Care Has Many Advantages:

Patients benefit from palliative dentistry treatment in a variety of ways, including: [1-3]

- Better dental health and function Pain and discomfort have been reduced.
- Improved eating and drinking abilities.
- Improved communication and social interaction.
- Improved sense of well-being and life quality.

Service Offerings of Palliative Dental Care:

Palliative dentistry treatment includes a variety of services that are tailored to each patient's specific requirements and condition. [1-5]

These might include oral hygiene evaluation and education, controlling symptoms and managing pain, Oral infection treatment, and Fluoride therapy are examples of preventive care. [5-9]

Managing pain is one of the most significant factors to consider in palliative care. It is still an essential component of excellent palliative care. Xerostomia, mucositis, candidiasis, dental caries, periodontal diseases, taste issues, and other oral problems are frequent in palliative patients. The following illustrations depict the oral issues connected with palliative care. [8-11]

XEROSTOMIA

Xerostomia is the subjective perception of mouth dryness; it is a symptom, not a diagnosis or condition. Xerostomia is frequent in palliative care patients, primarily as a result of head and neck medicines or radiation. The most basic test for xerostomia is to ask the patient if his or her mouth feels dry. Although dry mouth or xerostomia does not necessarily correspond with salivary gland hypofunction, the doctor should address the patient's main complaint. [12-15]

To lubricate the oral tissues, water-soluble lubricants should be utilized. Because it includes lactoperoxidase, lysozyme, glucose oxidase, lactoferrin, and no glycerin, Oral Balance gel is a great water-soluble agent and an alternative to traditional lubricants. [1-8]

Nursing personnel should be advised to use a foam brush to spread the product thinly all around the mouth. These goods have no disagreeable flavour. Petroleum-based products, like Vaseline, are anhydrous and hygroscopic, meaning they absorb water from the tissues. They may also block dangerous microorganisms, preventing saliva from removing them from the mouth cavity. [4,5]

Alcohol-containing mouth rinses should be avoided further desiccate the mouth. There are alcohol-free rinses available, such as Oral B anticavity rinses. Saliva replacements

benefit the patient and should be used before eating to facilitate swallowing.³ The cholinergic-mimetic medicines pilocarpine and cevimeline have not been thoroughly studied in palliative care. [11-16]

Although topical applications of malic acid, vitamin C, and citric acid can stimulate saliva, their low pH adds to tooth demineralization.

STOMATITIS AND MUCOSITIS

Mucositis and stomatitis are typical side effects of chemotherapy and radiation.⁴ Chemotherapy targets tissues with a high mitotic rate, and the oral cavity is usually impacted. Reduced mitosis produces tissue shrinkage, which can lead to ulceration, which can be exacerbated by microbial invasion.⁵ Mucositis develops

between 5-7 days of treatment using mucositis-causing medications such as 5-fluorouracil and methotrexate.

Radiotherapy for head and neck cancer causes xerostomia due to the loss of salivary tissues inside the treatment zone. The loss of lubrication and protecting substances in saliva makes tissues more vulnerable to trauma and pathogen invasion. Pain relief is the primary goal of mucositis and stomatitis treatments. Topical anaesthetics such as xylocaine and dyclonine give relief but should be used with caution since they inhibit the gag reflex and increase the risk of aspiration. In addition to its anaesthetic

properties, dyclonine has been demonstrated to have anti-inflammatory effects.⁶ Herpetic stomatitis has been treated with a rinse containing 5% diphenhydramine hydrochloride and loperamide. Milk of Magnesia should not be substituted since it causes dry mouth. Sucralfate should be utilized on a case-by-case basis, and the clinician should not only analyze the clinical indicators of mucositis but also obtain the patient's assessment of his or her condition. [16-20]

Many oncologists recommend a "magic mouthwash" mixture. It includes a wide range of chemicals, including antihistamines, antifungals, topical anaesthetics, and even antibiotics. These substances should not be taken as an ultimate solution, but rather as remedies to alleviate particular problems.

A 0.2% morphine solution can be administered topically to ease the discomfort associated with mucositis after teaching patients to expectorate thoroughly by practising with saline solution. To avoid overdose, patients must be carefully selected.[9-12]

Before implementing any of the foregoing procedures, it is critical to detect any local traumatic causes, such as shattered restorations or teeth, or an impinging detachable prosthesis. Patients should also be encouraged to refrain from eating hot meals, smoking, and alcohol.[11-14]

CANDIDIASIS

Candida infection is predicted to affect 70% to 85% of palliative care patients. low oral hygiene, xerostomia, immunological suppression, use of corticosteroids or broad-spectrum antibiotics, low nutritional condition, diabetes, and denture use are all risk

factors for fungal infections. Candida albicans is the most commonly observed infectious pathogen in candidiasis. It is a

typical oral cavity dweller whose proliferation is generally inhibited by other non-pathologic bacteria and natural host defence systems. The existence of a positive culture in the absence of clinical symptoms does not indicate Candida infection.[10]

Candida infections include pseudomembranous, erythematous, or hyperplastic candidiasis, as well as angular cheilitis. Pseudomembranous candidiasis (thrush) is characterized by tiny white or yellow plaques with erythemic regions around them.

These sores can be wiped away to reveal bare mucosa.

Erythematous (atrophic) candidiasis manifests as red lesions on the tongue's hard palate and dorsal surface. The plaques in hyperplastic candidiasis do not wash away like those in pseudomembranous candidiasis. Angular cheilitis is characterized by white and red cracks radiating from the corners of the mouth. It frequently contains bacterial and fungal components.[11-15]

Higher levels of candida in the saliva are more common in denture users than in dentate individuals.[12] Commercial hydrogen peroxide releasing agents have been proven to be unsuccessful in denture disinfection.[13,14] Soaking the denture for 30 minutes in bleach (15 mL) and water (250 mL) will help remove odours.

Bleach solution should not be used to soak partial dentures since it can cause metal fatigue. Microwaving soft denture linings repeatedly might cause them to harden. Dentures should be kept in clearly labelled jars in water, mouthwash, 0.12% chlorhexidine, Listerine antiseptic, or 100,000 IU nystatin suspension solutions.[15]

Candidiasis can be treated with a mix of topical and systemic treatments. Nystatin is one topical medication that may be used in a variety of ways. Nystatin's fungicidal efficacy is directly dependent on contact time with oral tissues, which is often small

with the solution because most patients drink it quickly. Nystatin suspension has a high sugar content and should be used with caution in the xerostomic dentate patient.[15-22]

Systemic drugs should only be used when topical treatments are unsuccessful, as they are costly and may cause renal or hepatic damage. The antifungal medicines' medication interactions should be noted by the treating dentist. Antacids, which raise

stomach pH, reduce ketoconazole absorption.

DENTAL CARIES AND PERIODONTITIS

Patients with terminal end-stage are more likely to develop caries and periodontitis, with the most common cause being radiation therapy, which causes changes in salivary flow, decreased pH, reduced buffering capacity, increased viscosity, reduced cleansing action, and debris accumulation, all of which contribute to an increased rate of caries and periodontitis. A combination of restorative dental procedures, appropriate oral hygiene, and topical sodium fluoride treatment is the most effective strategy to prevent caries. Teeth that are significantly decaying and periodontally impaired should be removed based on the patient's health state, since this improves the patient's comfort when eating. To increase masticatory effectiveness, lost teeth should be restored.

NAUSEA AND VOMITING

Nausea and vomiting in palliative care patients can be caused by a variety of factors, including chemotherapy, opiate usage, intestinal blockage, pancreatitis, and electrolyte imbalance, or they might be caused by movement or an emotional reaction.

Vomiting is caustic to the hard tissues and might worsen the morbidity of mucositis. It may also cause a delay in healing if the patient is unable to eat the nutrients required for tissue repair.

Many of the medications used to treat nausea and vomiting have oral adverse effects, the most famous of which are tardive dyskinesia and xerostomia. Xerostomia has an impact on nutrition, communication, and oral tissues. Although the antiemetics' oral effects are significant, the inability to swallow meals and drugs orally has far-reaching consequences. The palliative care personnel address emotional outbursts by listening to the patient's problems and recommending calming strategies.[9]

Nutritional, hydration, and taste disorders Nervous system illnesses, chronic renal and liver diseases, endocrine disorders, medicine and a variety of conditions affecting the nose and oropharyngeal area are common risk factors for reduced taste and smell. Patients in palliative care are unable to take food or fluids if their oral cavity is affected. These patients typically

do not burn a high quantity of calories and eat lightly.

Dehydration can be caused by vomiting, diarrhoea, fever, swallowing problems, and anorexia, which can lead to xerostomia. Patients in palliative care should be gently urged to drink as much as possible. A room humidifier, especially for mouth breathers, can assist in alleviating oral dryness during the winter months.

Many palliative care patients experience dysgeusia as a result of chemotherapy or head and neck radiation.[16] Zinc supplements can help to fix this.[17] To increase the patient's appetite, give dishes with gravy, which assists in swallowing for the xerostomic patient. Food can benefit from the addition of monosodium glutamate.²

OSTEORADIONECROSIS

Osteoradionecrosis is characterized as slow-healing radiation-induced

ischemia necrosis of bone with varied amounts of soft tissue necrosis occurring in the absence of local original tumour necrosis, recurrence, or metastatic illness. The most prevalent cause of osteoradionecrosis is a radiation dosage of more than 65-

75 Gy. Trauma can be a pathophysiology in infection and radiation theory. Unrepairable teeth caused by caries, periodontal disease, or root lesions can lead to bone infection and osteoradionecrosis.

Alcohol and tobacco abuse have been recognized as risk factors for the same.

DEPRESSION

Depression is frequent among terminally sick patients. The palliative care dentist must spend time listening to his or her patient. The dentist should sit close to the patient rather than stand next to the patient's bed. Make eye contact and gently touch the patient's hand or shoulder to show empathy. It is also crucial to thank any family members or significant others who may be there.

These folks require the same level of emotional care as the sick. Many people who become sad are administered antidepressants, which are also used to relieve pain. Many of the drugs can induce

xerostomia.[18] The dentist should advise the doctor on which saliva-sparing antidepressant to use; for example, amitriptyline is more xerogenic than citalopram.[19-25]

Patients who are disappointed may neglect routine oral hygiene practices, which might worsen periodontal disease, caries, and halitosis. When confronted with these situations, some friends and relatives may reduce or discontinue their visits, causing the patient to become even more despondent. As a result, the palliative care dentist must emphasize good dental hygiene.[20-25]

FUTURE DIRECTIONS AND CHALLENGES

Despite its rising relevance, various obstacles prevent palliative, dental care from being widely implemented. [21-25] These include:

- Lack of understanding and awareness among healthcare providers and patients.
- There is a scarcity of qualified and skilled dentists.
- Inadequate funds and resources.
- Integration with the current healthcare system.

Overcoming these issues necessitates a multifaceted strategy that includes dental practitioners receiving more knowledge and training, campaigns to increase public understanding and usage of palliative dental treatment, and specialized training programs and certification for palliative dentistry being developed. Advocating for policy reforms and more financing. Collaboration across other healthcare disciplines to ensure that palliative dental treatment is seamlessly integrated into the entire patient care plan.[20-25]

CONCLUSION

Palliative care medicine is a growing field that is becoming increasingly important in today's fast-paced environment. This can be attributed to the fact that modernity and current living styles have many psychological and physical morbidities as side consequences. Palliative care patients require particular dental treatment. Numerous adverse reactions of such diseases

and therapies frequently affect the oral cavity, creating a great deal of discomfort and disruption in the usual diet, affecting nutrition and general well-being. This extends beyond surgical and preventive treatment to the notion of whole patient care, which encompasses both the physical and emotional components of well-being. The function of the dentist in palliative care is to improve the patient's quality of life. Dental practitioners contribute to a holistic approach to healthcare that stresses the well-being of the complete person by knowing and treating the special oral health needs of patients with advanced or life-limiting conditions..

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