Research Article

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Role of Oral Medicine in Palliative Care

Thalaimalai Saravanan[1*] Raj Mahendra[2] Sureshbabu Harish[3] Alagarsamy Venkatesh[4]

[1]Professor, Department of Oral Medicine and Radiology, Karpaga Vinayaga Institute of Dental Sciences, Kanchipuram, TN, India.
[2]Professor and Head, Department of Oral Medicine and Radiology, Karpaga Vinayaga Institute of Dental Sciences, Kanchipuram, TN, India.
[3]Intern, Karpaga Vinayaga Institute of Dental Sciences, Kanchipuram, TN, India.
[4]Professor, Department of Conservative Dentistry & Endodontics, Sree Balaji Dental College & Hospital, Chennai, Tamil Nadu, India.

ABSTRACT

Background: Palliative care is a versatile approach that aims to improve the quality of life of patients through the prevention and relief of suffering by early identification and exemplary assessment and treatment of pain and other physical, psychosocial and spiritual problems. It is ideal that palliative care team should include specialists from various fields to provide comprehensive overall care to the patient. Head and neck cancer impacts uniquely on the health and well-being of patients. Alleviation of pain, reducing the suffering, providing relief, treatment of any other complications which occur during the treatment or post treatment of the cancer patients are taken care in palliative care. The dental or oral medicine specialist can play an important role in alleviating both the physical and psychological pain of dying and in treating the effects caused due to chemotherapy and radiotherapy. This article discusses a series of cases where the role of an oral medicine specialist is highlighted in palliative care of a patient.

Keywords: Dentistry, Oral cancer, Oral medicine, Palliative care.

INTRODUCTION

Oral cancer, the sixth most common malignancy, is a major cause of cancer morbidity and mortality worldwide [1]. The aim of palliative care is to manage the symptoms and to keep the patients out of emergency rooms and comfortable in their own homes while they may or may not be seeking curative treatment. The WHO has defined palliative care as "the active total care of the patient whose disease is not responsive to curative treatment" [2]. The different kinds of oral problems experienced in oral cancer may include mucositis, stomatitis, xerostomia, candidiasis, dental caries, periodontal diseases, taste disorders, difficulty in swallowing and speaking. Wiseman defined palliative care dentistry as "the study and management of patients with active progressive and 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"[3].

CASE REPORT

CASE 1

A 28 year old male patient reported to our palliative care OP with the chief complaint of pain in the left cheek region for the past 2 months. Patient was unable to eat and speak with continuous pain and presented as secondaries with unaesthetic appearance.

TREATMENT:

Oral morphine (10 mg 6th hourly) was given for pain management and dressing done once in every two days.

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***Correspondence Dr. Thalaimalai Saravanan.**
Department of Oral Medicine and Radiology, Karpaga Vinayaga Institute of Dental Sciences, Kanchipuram, TN, India.
Email: Not Disclosed

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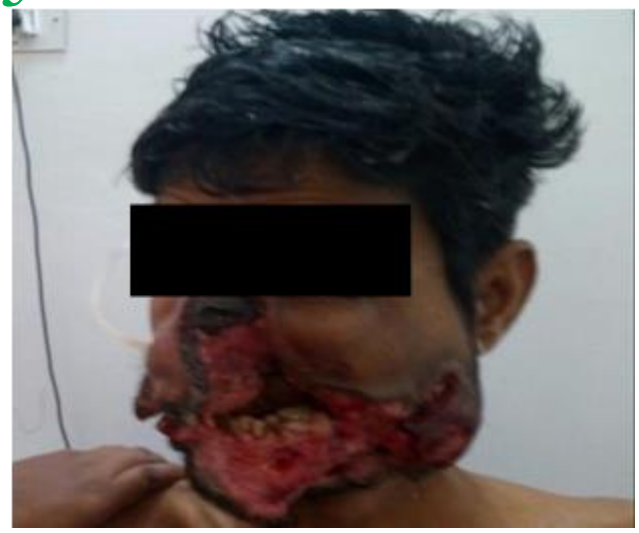
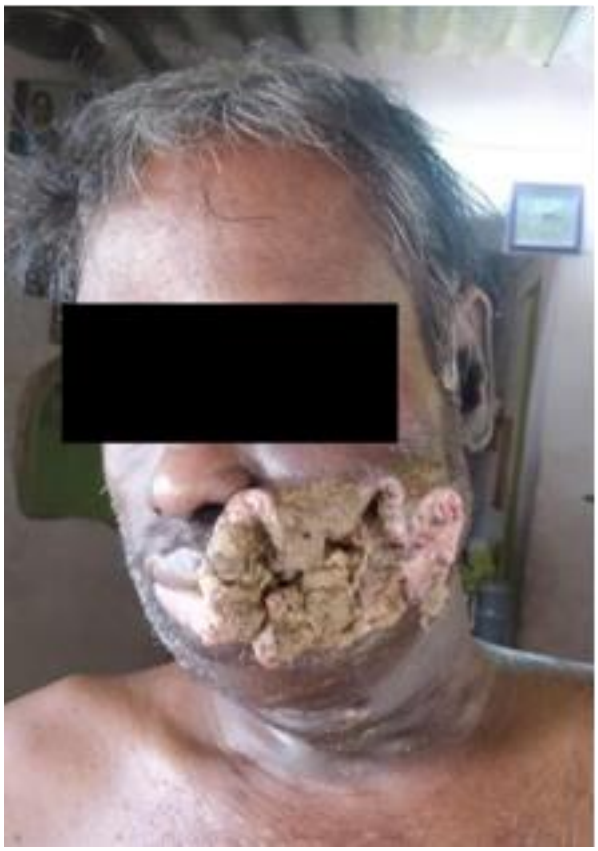


CASE 2

A 40 year old male patient reported to our palliative care OP with the chief complaint burning sensation and pain for past 20 days patient had burning type of pain with unaesthetic appearance. TREATMENT:

Oral morphine (10 mg 6th hourly) was given for pain management along with neuropathic management and dressing done once in every two days.

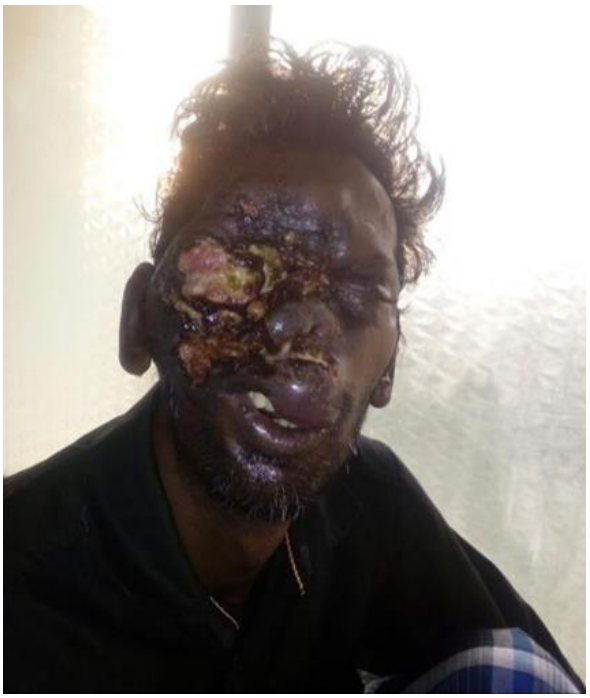


CASE 3

A 32 year old male patient reported to our palliative care OP with the chief complaint with painful ulcer with esthetic impairment for past one month.

TREATMENT:

Oral morphine (10 mg 4th hourly) was given for pain management and dressing done with topical metronidazole powder once in a day.



DISCUSSION

ORAL REFLECTION IN PALLIATIVE CARE:

The evaluation of oral illness is similar to evaluation of other medical problems. It includes

1. A detailed history.

2. Recording Performing examination, and the use of proper investigations which should also be preferably cost effective.

3. General observation, extra-oral examination, and intra-oral examination including lips and gums, teeth, cheek, floor, palate.

A full scale clinical examination of the extra and intra oral soft tissues, hard tissue and periodontium is to be made. Patient perception and motivation are very much essential to reduce potentially destructive dental complications. Oral care has to be

made to maintain the integrity of oral mucosa, prevent caries and any periodontal disease, reduce oral pain and discomfort and prevent or treat infectious complications that can further add on to the patient's suffering.

ORAL CONSIDERATIONS IN PALLIATIVE CARE: LEVELS OF PALLIATIVE CARE:

1. Declaration– explaining the situation / condition to patient and family. During the course of treatment. After cessation of treatment

2. Case of secondary metastasis

3. Care for moribund patients

THE VARIOUS GOALS OF PALLIATIVE CARE ARE,

1. Proper care with maximum quality.

2. Pain relief and infection control.

3. Comfort of the individuals.

4. Debris free oral cavity.

5. Dignity of the family and the individual.

COMMUNICATION:

Communication in palliative care dentistry is of vital importance. Communication starts with body language which includes facial expressions, hand positions, body posture etc. All of these can give a confidence to the patient. The patient should be ready to discuss the presence or absence of pain and fear. Palliative care allows patients and family members to get involved in care. Communication in palliative care involves specific communication tasks (breaking bad news and explaining regarding the Palliative care goals).

MANAGEMENT OF PAIN IN CANCER PATIENTS:

The suffering pain in cancer patients can be either because of the disease itself or as a result of the treatment. The aim of Palliative Care pain management is to obtain a satisfactory level of comfort for the patient. WHO method involves the use of oral opioids for moderate to severe pain. Morphine is the standard opioid analgesic. It is widely available in a variety of oral formulations and doses may vary 1000 fold or more to achieve the end point of pain relief [4].

TOPICAL TREATMENT:

1). Localized pain:

a. Choline salicylate gel can be used to treat localized pain.

b. Topical local anesthetics, lidocaine (lignocaine) 5% ointment or 10% spray can be used for oral ulcerations but has a limited role.

c. Carmellose paste can be used as a protective coat over the ulcered tissue.

2). Diffuse pain:

a. In case of area with more extensive pain Benzydamine mouthwash or spray can be used.

b. Diclofenac dispersible tablets can be used as mouth washes.

c. In case of severe pain Topical morphine can be considered. Morphine sulphate 10 mg/ 5ml solution mouth wash can be used.

d. Carbenoxolone acts as a protective barrier in the sites of ulcerations.

e. Gel Clair can also be used which gives mechanical protection.

SYSTEMIC TREATMENT

The systemic treatment is based on the severity of the pain. The WHO has given a pain ladder [Figure 1] representing the most effective way for the management of pain [5]. When there is inadequate pain control at level 1 then it is time to move up to the next stage of pain ladder with much stronger analgesics [Table 1].

Fig 1: WHO's Pain relief ladder.

Table 1: The commonly used analgesics:

OPIOIDS DRUGS	INITIAL DOSE	ORAL DOSE	PARETERNAL DOSE
Morphine	30 mg every 3 -4hrs	10 mg	30 mg every 4hrs
Codeine	180 mg every 3-4hrs	---	60 mg every 3-4hrs
Oxycodone	30 mg every 3-4hrs	10 mg	10 mg every 3-4hrs
Hydromorphone	7.5 mg every 3-4hrs	1.5 mg	6 mg every 3-4hrs
Methadone	20mg every 6-8hrs	10 mg	20 mg every 3-4hrs

XEROSTOMIA:

Xerostomia can be commonly seen as a result of medication or radiotheraphy to head and neck. The various symptoms may include dryness, burning sensation of the mouth, altered taste, chewing and swallowing difficulty. Clinical signs may include thick ropey saliva, lip stick sign, candiasis, and increased rate of dental caries, bald and fissured tongue.

Management of xerostomia: Symptomatic:

1. Sips or sprays of cold water frequently.
2. Ice cubes sucking.
3. Chewing sugar-free gum.
4. Usage of petroleum jelly to prevent sore cracked lips.

5. Acupuncture and TENS therapy may be useful for resistant cases.

Pharmacological:

1. If simple measures are inadequate, artificial saliva containing mucin (AS Saliva Orthana®) or lactoperoxidase (Biotene Oralbalance® and BioXtra®) should be considered.

2. Pilocarpine 5 mg thrice daily.

3. Alcohol free rinses. Eg.Oral B anti-cavity rinse

Most people with drug-induced dry mouth respond after the first dose.

MUCOSITIS AND STOMATITIS:

Mucositis and stomatitis are the two common conditions seen in patients under chemotherapy and radiotherapy. The treatment of mucositis and stomatitis involves relieving the pain. Topical anesthetics, coating agents and diluting agents can be prescribed. Local traumatic factors such as fractured teeth, sharp teeth, fractured restoration or impinging removable prosthesis should be identified. Povidine iodine preparations can be used to clean the oral cavity that helps to prevent the colonization of the bacteria in the oral cavity. Patients should be advised to avoid the habits of smoking and alcohol.

VARIOUS AGENTS USED FOR THE MANAGEMENT OF MUCOSITIS:

A) Topical anaesthetics: Xylocaine Hcl, Benzocaine Hcl, Dyclonine Hcl

B) Lubricant: Wax, water based lubricants, Lanolin.

C) Coating agents: Kaolin- pectin, Aluminum chloride, Aluminum and magnesium hydroxide, Hydroxypropyl cellulose.

DENTAL CARIES AND PERIODONTAL DISEASES:

Patient at radiotherapy at the terminal end stage are usually prone to dental caries and other periodontal problems which can also cause changes in their salivary flow, decrease in pH of the oral cavity, reduction in the buffering capacity, increased viscosity, reduction in the cleaning action, accumulation of debris. A combination of restorative dental procedures, effective oral hygiene and topical fluorine application can be used for the management of proper oral hygiene. EXCESSIVE SALIVATION:

Excessive salivation is more common due to oral pain and intake of various drugs such as lithium, cholinesterase inhibitors, and muscarinic agonists such as pilocarpine. Management of the underlying cause may resolve excessive salivation in most of the cases. When the treatment doesn't work then symptomatic treatment with hyoscine hydrobromide 75–150 micrograms sublingually every 8–12 hours can be done.

CANDIDIASIS:

70 to 85% of Patients with palliative care suffer from candidiasis. Among all the factors the higher candida levels are seen in salivary secretions of patients who are denture wearers. Such patients

must be advised to take proper care of their dentures. The dentures must be properly cleansed with a soft tooth brush. The dentures must be stored in a solution of water, 0.12% chlorhexidine or 100,000 IU of nystatin suspension. Dentures can be stored for about 30 mins in a solution of 250 ml of water and 15mL of Bleach. Benzalkonium chloride (1:750) is also found to be effective in disinfecting dentures when soaked for a period of 30 mins.

NAUSEA AND VOMITING:

Vomiting can induce mucositis and also has caustic effect on hard tissues. Although antiemetics can be used, there may be more complication due to the inability to consume food and medication orally. Drugs like metoclopramide and hyoscine cannot be used in palliative care patients due to the association of adverse effects like xerostomia and dyskinesia. Drugs which are the selective 5HT3 receptor antagonists exert their antiemetic effect by blocking the peripheral and central 5- HT3 receptors. Ondanstetron is one of the most effective 5HT3 receptor antagonists. Newer drugs like dolasteron, palanosetron, tropisetron, granisetron can be used.

TASTE DISORDERS

Anti-seizure, oral hypoglycemics, antihypertensive, anti-Parkinson, anti-Depressant medicine can alter taste sensation and cause metallic taste or chemical taste in the mouth.

Treatment:

1) Artificial saliva agent prior to eating.
2) Zinc substitute.
3) Alternate nutritional foods.
4) Clean teeth using small soft toothbrush or foam stick and non-foaming fluoride.
5) Use of Toothpaste.

DIFFICULTY IN SWALLOWING:

Palliative patients can experience difficulty in speaking, swallowing. The patient can be taught effective mouth opening exercise. Rehabilitation of the missing teeth with prosthetic appliance can be encouraged as it may restore speech defects and esthetic improvement.

GERIATRIC PATIENTS:

The goal of palliative care for seniors who are either terminally ill or approaching the end stage of life is not to focus on disease, but to improve the quality of life and the relief their discomfort and pain. Early identification and management of potential dental problems plays an important role in relieving suffering at this stage of life.

PALLIATIVE CARE AND SPIRITUALITY:

With regards to spirituality and healing, there is a harmony about the influence of spirituality on recovery and the ability to cope and adjust to the varying and demanding states of health and illness. The first hand evidences suggest that spiritual support may act as an add-on to the palliative care of those with advanced diseases and at the end of life.

TERMINALLY ILL PATIENT:

1. Patients in the last 24–48 hours of their life usually have difficulty in taking food, fluid, or oral medication. A proper symptom control may allow the person to eat, drink, and talk with comfort.

2. The symptoms such as dry mouth and thirst are often seen in in dying patients whether they are dehydrated or not.

3. Frequent mouth care is necessary to maintain a clean mouth.

4. In unconscious patients, or patients who have difficulty in swallowing, it is easiest to clean and moisten the mouth gently using foam sticks soaked with water.

5. Pain should be managed symptomatically, using analgesics by suitable route.

CONCLUSION

Oral care is an important factor to be considered in palliative care of cancer patients. The oral medicine specialist can identify the source of infections, the nature of the disease and provide necessary treatment and preventive care to put the patient in a comfort zone in the terminal stage of his/her life.

The importance of oral care and the importance of oral medicine specialist must never be overlooked when providing palliative care because a healthy oral cavity can boost the confidence and comfort level of cancer patients with a touch of personal care and compassion.

CONFLICTS OF INTEREST

The authors declare they have no potential conflict of interests regarding this article.

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