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Review Article

Dentistry in Head and Neck Oncology: From Prevention to Rehabilitation – A Review

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Abstract

Head and Neck cancers account for a significant proportion of cancer cases worldwide and are associated with considerably morbidity. The oral cavity is often the primary site affected by the disease as well as by its treatment. Dentist play a pivotal role throughout the continuum of care- from primary prevention and early detection to treatment support, rehabilitation and long-term surveillance. This review highlights the comprehensive role of dentistry in head and neck oncology.

Keywords: Head and Neck Cancer; Oral Oncology; Rehabilitation; Radiotherapy; Oral Cancer

Introduction

Oral cancer constitutes nearly 5% of the global cancer burden; however, in India it represents a disproportionately high share, accounting for approximately 40% of all malignancies diagnosed nationwide [1,2]. Each year, an estimated 60,000 new cases of oral cancer are reported in the Indian population, highlighting its significant public health impact [3]. Dental practitioners frequently encounter oncology patients at various stages of care, including those who are pre-diagnosed, newly diagnosed, or have completed oncologic treatment.

The oral cavity is particularly vulnerable to complications arising either directly from malignant disease or as adverse effects of cancer therapy. Modalities such as chemotherapy and radiotherapy disrupt normal cellular turnover by causing destruction or delayed division of rapidly proliferating cells, including those of the oral mucosa [4]. This impaired regenerative capacity predisposes patients to a wide spectrum of oral lesions and infections.

As a member of the multidisciplinary oncology team, the dentist plays a crucial role in the prevention, early detection,

and management of oral complications related to cancer and its treatment. Responsibilities include the elimination of existing oral infection foci, implementation of standardized oral hygiene protocols, reinforcement of patient self-care measures, and prevention or alleviation of pain, thereby improving both treatment tolerance and overall quality of life [5]. The emerging discipline of Oncodentistry addresses these critical aspects by integrating dental care into comprehensive cancer management.

The role of dental oncologists

Dental oncologists are oral health specialists trained to prevent, identify, and manage oral complications arising from cancer and its therapies. They play a key role within the multidisciplinary oncology team, collaborating closely with medical and radiation oncologists, surgeons, speech therapists, and other allied healthcare professionals to deliver coordinated and comprehensive patient care [6].

- **Assessment and diagnosis:** Dental oncologists perform detailed oral and maxillofacial examinations to detect early signs of oral malignancy as well as complications related to oncologic therapy. Diagnostic procedures may include adjunctive imaging, cytological assessment, and biopsies to facilitate early identification and timely intervention [7].
- **Treatment planning:** In coordination with the oncology team, dental oncologists contribute to the formulation of individualized treatment plans that simultaneously address cancer management and oral health preservation. This includes pre-treatment dental clearance, risk assessment, and modification of dental procedures to minimize treatment interruptions and complications [8].
- **Management of treatment-related side effects:** Cancer therapies frequently result in adverse oral effects such as oral mucositis, xerostomia, dysphagia, opportunistic infections, and taste alterations. Dental oncologists implement evidence-based preventive and therapeutic strategies to alleviate these conditions, reduce pain, and enhance patient comfort and nutritional intake [9].
- **Post-treatment care and rehabilitation:** Long-term follow-up is essential for monitoring persistent or late-onset oral complications following cancer therapy. Dental oncologists manage restorative and rehabilitative needs, including dental restorations, prosthetic rehabilitation, salivary dysfunction management, and reinforcement of lifelong oral hygiene practices to improve quality of life and functional outcomes [10].

Role of dentistry across the cancer care continuum

Primary prevention

- **Tobacco and alcohol cessation:** Tobacco cessation counselling, pharmacotherapy (Nicotine replacement therapy), Regular follow up.
- **HPV Prevention:** Patient education, HPV vaccination awareness, safe sexual practises.
- **Oral Hygiene promotion:** Scaling, plaque control, fluoride application, dietary counselling.

Early detection and screening

- Common oral potentially malignant disorders - leukoplakia, erythroplakia, OSMF, oral lichen planus, actinic cheilitis.
- **Screening methods:** Oral examination, tissue biopsy, toluidine blue staining, salivary biomarkers, autofluorescence devices (Velscope), chemiluminescence (Vizilite).

Pre treatment dental assessment

A comprehensive dental evaluation should be completed before surgery, chemotherapy or radiotherapy.

- Clinical examination- Dental caries, periodontal status, mucosal lesions, prosthesis evaluation.
- Radiographic evaluation- IOPAR, OPG, CBCT, when indicated.
- Treatment planning- Extraction, periodontal therapy, restoration, endodontic treatment.

Ideally, extractions should be completed 10-14 days before radiotherapy to allow adequate healing.

Dental management during cancer therapy

- **Surgery:** Dental surgeons assist in oral preparation, surgical planning, immediate obturator fabrication, oral hygiene maintenance, rehabilitation planning.
- **Radiotherapy**: It causes several oral complications like mucositis, xerostomia, taste alteration, candidiasis, dysphagia,

pain, radiation caries, trismus, osteoradionecrosis, fibrosis, salivary gland disfunction. Preventive measures include daily fluoride application, salivary substitute, jaw opening exercises, mouthwash, nutritional counselling, frequent hydration.

- **Chemotherapy:** Common oral complications includes mucositis, opportunistic infections, bleeding, delayed healing, taste changes. Management include oral hygiene protocols, pain management, antifungal/antiviral/antibacterial therapy when indicated.
- **Targeted therapy and immunotherapy:** Potential oral adverse effects are oral ulcers, mucositis, xerostomia, dysgeusia, lichenoid reaction. Regular dental follow up is essential.

Anti-neoplastic chemotherapy and hematopoietic stem cell transplantation

Anti-neoplastic chemotherapeutic agents primarily act by inhibiting cellular proliferation and growth [11]. These agents lack selectivity for malignant cells and therefore also affect rapidly dividing healthy tissues, including the oral mucosa, bone marrow, skin, and hair follicles [12]. Of particular concern in dentistry is chemotherapy-induced bone marrow suppression, which results in immunosuppression and significantly increases susceptibility to opportunistic viral and fungal infections [13,14].

Pre-existing oral and dental infections may worsen during therapy and can progress to superinfection or tissue necrosis [15]. Additionally, oral mucositis—commonly associated with agents such as methotrexate, doxorubicin, 5-fluorouracil, busulfan, bleomycin, and platinum-based compounds—compromises the mucosal barrier, increasing the risk of systemic infection from local oral sources [17].

The severity and duration of bone marrow suppression depend on the chemotherapeutic regimen. Myeloablative regimens used in haematological malignancies cause profound and prolonged cytopenias, whereas non-myeloablative regimens used for solid tumors are less intensive. Recovery may be delayed in older patients or those with organ dysfunction or concurrent radiotherapy [21]. In hematopoietic stem cell transplantation recipients, prolonged immunosuppression is intentionally maintained to prevent graft-versus-host disease [24]. Consequently, the primary objective of dental care in these patients is the prevention of oral infections and their potential systemic dissemination [25].

Radiation therapy of head and neck

Radiation therapy uses ionizing radiation to eradicate malignant cells; however, it also unavoidably impacts the normal tissues within the treatment field. In head and neck radiation therapy (HNRT), osteoradionecrosis of the jaw (ORNJ) represents the most serious long-term dental complication, especially at radiation doses of ≥60 Gy [23]. ORNJ is defined as ischemic bone necrosis induced by radiation in the absence of recurrent disease and has been reported to occur in approximately 3–7% of cases [25].

Risk factors include high radiation dose, mandibular involvement, systemic comorbidities, poor oral health, invasive dental procedures, and ill-fitting prostheses [33]. Management remains challenging and ranges from conservative pharmacologic therapy to hyperbaric oxygen and surgical intervention [34].

Other common oral sequelae of HNRT include permanent salivary gland hypofunction and trismus, which markedly increase the risk of rapidly progressive dental caries [37]. Therefore, dental evaluation focuses on eliminating local risk factors prior to radiation and providing lifelong preventive oral care guidance.

Anti-resorptive and anti-angiogenic therapy

Osteonecrosis of the jaw linked to bisphosphonate therapy was initially described in the early 2000s. This condition is now broadly classified as medication-related osteonecrosis of the jaw (MRONJ), a term that includes jaw necrosis associated with anti-resorptive agents and anti-angiogenic medications used in oncology and metabolic bone disorders [40]. These drugs are widely used in oncology to prevent skeletal-related events and inhibit tumor angiogenesis.

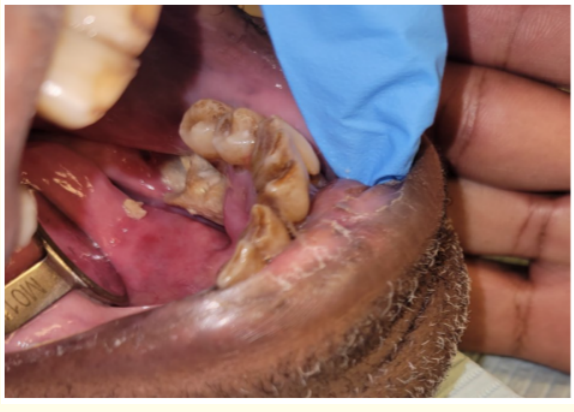

Figure 1: Bisphosphonate-Related Osteoradionecrosis of the Jaw [61].

MRONJ is diagnosed based on persistent exposed bone in patients with current or prior Anti resorptive agents (ARA) or Anti Angiogenic Agents (AAA) therapy, in the absence of head and neck radiation, its prevalence in cancer patients ranges from 0–18%, with increased risk associated with prolonged therapy, inflammatory dental disease, invasive dental procedures, systemic comorbidities, tobacco use, and immunosuppression [43].

Although no universally accepted treatment exists, management includes conservative measures, pharmacologic therapy, hyperbaric oxygen, and surgical intervention.[44] Given the growing use of these agents, comprehensive dental evaluation before initiating therapy is now considered standard practice to reduce modifiable risk factors for MRONJ [45].

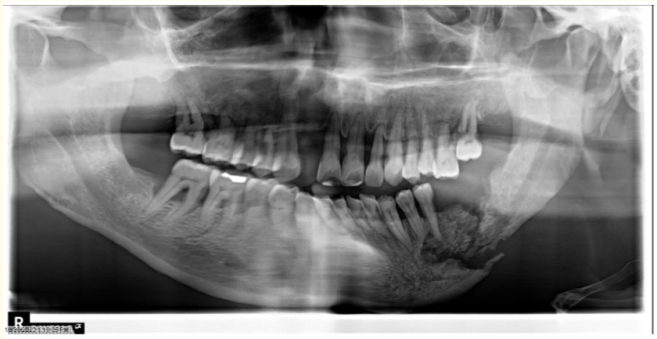

Figure 2: Medicine-Related Osteoradionecrosis of the Jaw [61].

General principles of dental evaluation prior to anti-neoplastic therapy [60]

	Complete clearance protocol	Partial clearance protocol
Caries prevention	• Application of professional topical fluoride varnish at least twice yearly • Consider regular use of high fluoride (≥2,800 ppm) toothpaste	
Dental caries	• Extract non-restorable teeth, teeth with guarded or poor prognosis and retained roots	• Treat only large or symptomatic carious teeth
	• Restore all carious teeth	• Restore teeth with mild and moderate caries only if time permits. If not, regular topical fluoride therapy application is advised. Silver diamine fluoride may also be considered
	• Replace all defective restorations	• Treat only defective restorations that are symptomatic
Non carious lesions	• Restore non-carious lesions that affect maintenance of good oral hygiene • Extract large non-carious lesions that approximate the pulp	• Treat only symptomatic non-carious lesions
Pulpal and periapical pathology	• Extract primary teeth with deep caries, pulpal or periapical pathology • Permanent teeth - Symptomatic and asymptomatic non-vital teeth: Initiate root canal treatment at least 1 week before anti-neoplastic therapy to allow for sufficient time to assess treatment success. If not possible, extraction should be considered - Previously root canal treated teeth with apical periodontitis: Retreat, extract or perform apicoectomy	• Treat only symptomatic teeth with apical periodontitis and/or periapical lesion ≥ 5 mm
Periodontal disease	• Professional cleaning	
	• Extract teeth with advanced periodontal disease (probing depth ≥ 6 mm, furcation I, II, III, tooth mobility II-III)	• Extract only teeth with severe periodontal disease (probing depth ≥ 8 mm, mobility III)
Prosthesis and appliances	• Check dentures for irregularities or sharp edges and adjust accordingly • Remove orthodontic appliances that may aggravate mucosal injury	
	• Modify, disassemble or replace fixed prosthesis suspicious of recurrent caries, marginal leakage or affecting maintenance of good oral hygiene	• Modify, disassemble or replace only fixed prosthesis with large or symptomatic caries
Misaligned teeth	• Extract supra-erupted and grossly misaligned teeth	• No recommendation
Exfoliating teeth	• Extract mobile deciduous teeth with >50% physiological root resorption or those that are expected to exfoliate	• Extract only severely mobile deciduous teeth that are expected to exfoliate within a few weeks
Partially impacted third molars	• Extract asymptomatic and symptomatic partially erupted impacted third molars	• Extract only partially erupted impacted third molars with evidence of pericoronitis or purulence

Figure a

During radiotherapy

During active cancer therapy, patients commonly experience profound fatigue and treatment-related complications such as neutropenia, thrombocytopenia, and painful oral mucositis. Under these conditions, elective dental treatment should be avoided wherever possible, and oral care should focus on prevention, symptom control, and maintenance of oral comfort [46].

As part of the pre-radiation dental evaluation process, it is to fabricate prosthetic radiotherapy devices to shield, displace and position tissues in an attempt to reduce radiation-induced tissue morbidity. Positioning stents may be used to rearrange tissue tomography within the radiation treatment volume and displace normal tissue's away from high-dose radiation treatment volume particularly for tongue and floor of the mouth lesions related with chemoradiotherapy (CRT).[46] Shielding stents are used to displace tongue away from the treatment area and to increase the vertical dimension of occlusion. Tissue bolus devices are tissue-equivalent materials placed on or in a patient's body during radiotherapy to create a homogenous, uniform dose distribution, reduce radiation-induced tissue morbidity, and enhance skin-surface dose [46].

Figure 3: Positioning Stent [46].

A high standard of oral hygiene should be encouraged throughout treatment, including meticulous denture hygiene, with appropriate support from dental hygienists when feasible. When mechanical plaque control with toothbrushing is inadequate or painful, the use of an alcohol-free chlorhexidine mouthwash may be recommended as an adjunct or short-term alternative [47].

Patients undergoing head and neck radiotherapy or total body irradiation prior to hematopoietic stem cell transplantation are at particularly high risk for rapidly progressive dental caries and should receive individualized dietary counselling and age-appropriate fluoride supplementation [26].

Both pediatric and adult patients receiving bone marrow transplantation may be prescribed antiviral prophylaxis, such as acyclovir, when the risk of viral reactivation is high; this is typically initiated and monitored by the oncology team [27]. Antifungal therapy should be instituted upon clinical or microbiological detection of oral candidiasis, and in some oncology centers, antifungal prophylaxis is routinely administered to pediatric patients [48].

Every effort should be made to reduce the severity of oral mucositis and to alleviate xerostomia, as these conditions significantly affect quality of life and increase the risk of oral disease [46]. Removable prostheses may become uncomfortable during therapy and should be removed if they cause irritation. Any discomfort warrants prompt evaluation and adjustment by a member of the dental team to ensure atraumatic fit.

When oral pain makes the use of a soft toothbrush intolerable, gentle cleaning of the oral tissues can be carried out with oral sponges or gauze soaked in alcohol-free chlorhexidine mouthwash. Patients should be instructed to avoid irritating foods, drinks, and oral rinses to help preserve mucosal comfort and reduce the risk of tissue trauma [49].

Post-surgical defects and prosthetic rehabilitation

Rehabilitation of patients with post-surgical oral and maxillofacial defects aims to restore essential functions such as mastication, speech, and swallowing, as well as facial aesthetics. This is typically achieved through the provision of intra-oral prosthesis such as obturator, palatal lift prosthesis, speech bulb, etc and extra-oral prostheses such as orbital, nasal, auricular prosthesis by prosthodontists [50].

In advanced cases, implant-supported prostheses may be considered; however, the detrimental effects of radiotherapy on bone healing and implant osseointegration must be carefully evaluated [51]. The fit and function of prostheses require regular review, as radiation-induced oedema and fibrosis may compromise retention and comfort over time. Prosthesis hygiene should be continually reinforced to minimize the risk of secondary infections.

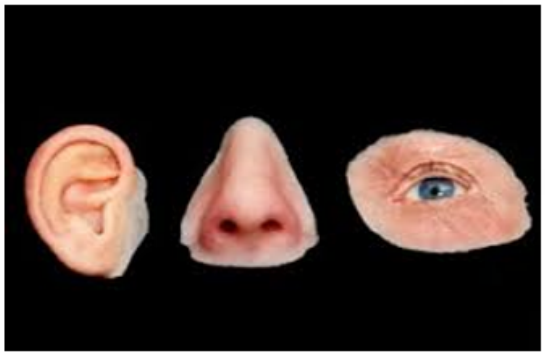

Figure 4: Extraoral Maxillofacial Prosthesis [50].

Dental practitioners also play a critical role in long-term surveillance, as routine dental follow-up facilitates early detection of disease recurrence, thereby contributing significantly to ongoing patient management [52].

Management of oral mucositis

Therapeutic options for oral mucositis remain limited, and current evidence does not conclusively support any single pharmacological regimen. Consequently, meticulous oral hygiene and supportive care are essential to reduce severity and improve patient comfort [21]. Gentle cleansing using a soft toothbrush, gauze, or oral sponges in combination with bland rinses such as saline, sodium bicarbonate, or sterile water is recommended. Toothpastes containing sodium lauryl sulphate should be avoided to prevent further mucosal irritation [53].

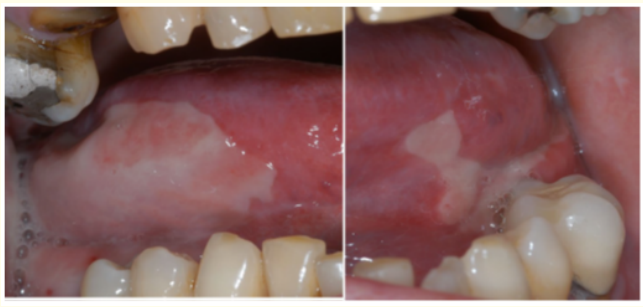

Figure 5: Oral Mucositis [61].

Barrier solutions and mucosal coating agents, may help reduce symptom severity. As mucositis progresses, topical analgesics and anaesthetic agents—such as viscous lidocaine, benzocaine preparations, benzydamine hydrochloride rinses, and lidocaine lozenges—often become insufficient, necessitating systemic analgesia. This is typically managed by the multidisciplinary team using NSAIDs or opioids in severe cases. Advanced mucositis may prolong hospitalization and increase reliance on nutritional and analgesic support. Denture use should be avoided during ulcerative phases [54].

Management of candidal infection

Prior to initiating antifungal therapy, a definitive diagnosis of oral candidiasis should be established through culture and sensitivity testing. Mild to moderate infections are commonly treated with topical antifungals such as nystatin or clotrimazole, applied after thorough oral cleansing and with dentures removed. Miconazole may be applied to the fitting surface of dentures.

Systemic antifungal agents, including fluconazole or ketoconazole, are indicated in cases of severe, persistent, invasive candidiasis or when infection coexists with oral mucositis [48].

Management of xerostomia and radiation caries

Patients with therapy-induced xerostomia are at high risk of rapidly progressing dental caries and must adhere to stringent oral hygiene and dietary measures. Nutritional management in head and neck cancer patients is complex, as recovery often necessitates energy-dense diets that may compromise dental health. Therefore, dietary counselling should be integrated into the overall treatment plan, emphasizing reduced intake of fermentable carbohydrates, avoidance of sticky foods, and elimination of sugar-containing medications when possible. Close collaboration with dietitians is essential. Smoking and alcohol consumption should be strongly discouraged due to their exacerbating effects on oral dryness [55].

Toothbrushing four times daily using high-fluoride toothpaste (e.g., 5,000-ppm fluoride formulations), supplemented with fluoride mouth rinses, promotes remineralization. Interdental cleaning should be resumed when mucosal integrity permits. Daily application of 1% sodium fluoride or 0.4% stannous fluoride gels using custom trays during and after radiotherapy is an effective preventive strategy. Remineralizing agents containing casein

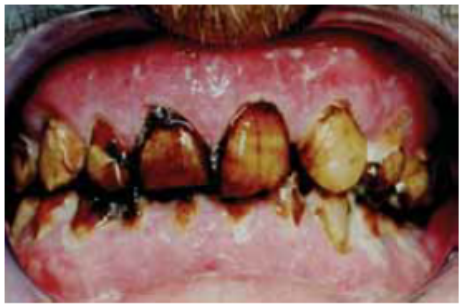

Figure 6: Radiation Induced Caries [62].

phosphopeptide–amorphous calcium phosphate may be beneficial in early demineralization. Chewing gums containing xylitol or sorbitol can stimulate residual salivary flow and reduce cariogenic bacterial activity [22].

Alcohol-free chlorhexidine mouthwashes (0.12–0.2%) may be used for chemical plaque control; however, fluoride and chlorhexidine should not be used concurrently to avoid interactions. Alternatively, sodium bicarbonate rinses can help buffer oral acidity. Numerous salivary substitutes are available and may improve oral function and quality of life, although none has demonstrated clear superiority. [23] Saliva replacement gels may provide symptomatic relief.

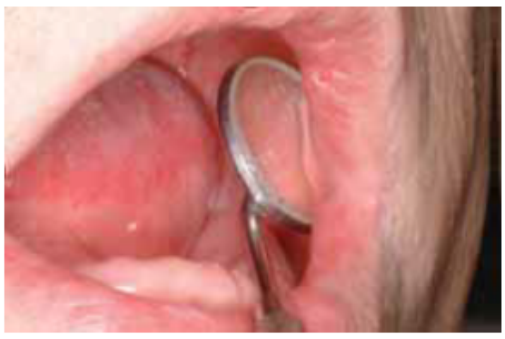

Figure 7: Radiation Induced Xerostomia [62].

Systemic sialagogues such as pilocarpine (5 mg three times daily) can enhance salivary flow when residual gland function exists, although adverse effects may limit use. Adjunctive therapies including acupuncture, hypnosis, and hyperbaric oxygen have been proposed, but further evidence is required [56].

Management of osteoradionecrosis (ORN)

Approximately 60% of early and localized cases of osteoradionecrosis can be managed conservatively through medication and meticulous wound care [24]. Nevertheless, suspected cases should be promptly referred for specialist evaluation. Adjunctive therapies such as ultrasound and electromagnetic stimulation have shown potential benefits. Pharmacologic management with pentoxifylline and tocopherol has demonstrated synergistic antioxidant and antifibrotic effects, promoting tissue healing.

The routine use of antibiotics in ORN management lacks robust evidence, and the role of infection remains unclear. Despite widespread clinical use, current data do not conclusively support the efficacy of hyperbaric oxygen therapy [25]. In advanced or refractory cases, surgical intervention may be required, with modern reconstructive techniques utilizing vascularized bone-containing flaps offering improved outcomes.

Orthodontic considerations in oncology patients

Orthodontic treatment planning in oncology patients must be undertaken with careful consideration of the individual's systemic health status, caries susceptibility, and ability to maintain optimal oral hygiene. [36] Additional factors such as the magnitude of orthodontic forces, expected duration of treatment, and any pre-existing root resorption should be thoroughly evaluated, as these conditions may worsen during orthodontic therapy [37].

In patients receiving antiresorptive medications, particularly bisphosphonates, orthodontic extractions require heightened caution due to the documented risk of medication-related osteonecrosis of the jaw (MRONJ), reported to range between 0.2% and 6.7% [38]. Bisphosphonate therapy may also reduce the rate of orthodontic tooth movement and significantly prolong treatment duration. Consequently, orthodontic treatment is generally contraindicated during and in the immediate period following intravenous bisphosphonate administration.

Oncological therapies may induce adverse craniofacial and dental changes, including mandibular retrognathia, reduced craniofacial growth, and increased tooth mobility. In such cases, orthodontic treatment objectives should be simplified, employing low-force mechanics to reduce the risk of root resorption. Where feasible, orthodontic intervention involving the mandible should be avoided [39].

Orthodontic treatment may typically be recommenced approximately two years after the completion of chemotherapy or radiotherapy, allowing for recovery from prolonged alterations in bone metabolism and resolution of therapy-related discomforts such as nausea, xerostomia, dysgeusia, and mucosal sensitivity. In contrast, when cancer management has involved surgical intervention alone, without adjunctive chemotherapy or radiotherapy, no mandatory delay in orthodontic treatment is required [40].

Tooth whitening procedures are generally considered safe when appropriately administered; however, transient adverse effects such as dentinal hypersensitivity and soft tissue irritation may occur. Therefore, whitening in post-oncological patients should be approached cautiously following comprehensive clinical assessment, including evaluation of caries activity, non-carious cervical lesions, periodontal health, salivary flow, mucosal integrity, and baseline tooth sensitivity. To minimize complications, lower concentrations of carbamide peroxide used over extended durations are preferable to high-concentration hydrogen peroxide formulations [41].

Trismus

Trismus is a frequent complication of head and neck cancer treatment, particularly radiotherapy, and is characterized by restricted mouth opening due to spasm or fibrosis of the muscles of mastication [21,22]. Normal maximal interincisal opening (MIO) ranges from 36–55 mm, with values <35 mm considered diagnostic of trismus [23]. This condition significantly interferes with mastication, speech, oral hygiene maintenance, prosthesis use, and dental treatment delivery [26].

Among patients treated with intensity-modulated radiotherapy (IMRT), the reported prevalence of trismus varies widely from 4% to 77.3% [27]. Identified risk factors include reduced pre-radiotherapy MIO and higher radiation doses to the masticatory muscles, particularly the medial pterygoid [34]. Patients with baseline MIO ≤40 mm and those receiving incremental radiation doses show a substantially increased risk [34]. Importantly, early limitation in mouth opening is often related to acute mucositis, whereas chronic trismus results from radiation-induced fibrosis.

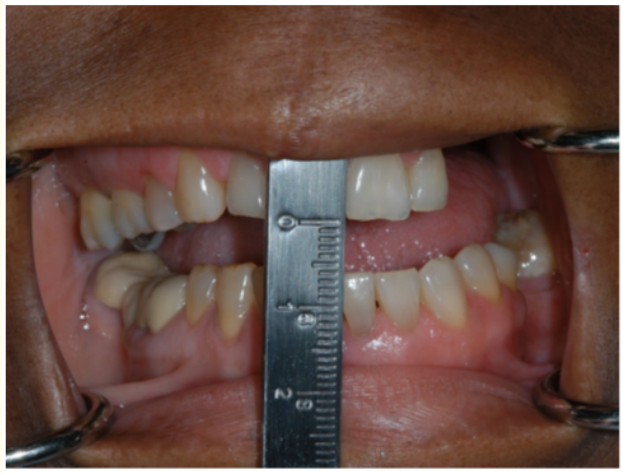

Figure 8: Radiation Induced Trismus [61].

Management is challenging; therefore, prevention is paramount. Patients should be counselled prior to radiotherapy and encouraged to perform regular jaw-opening exercises throughout treatment [35,36]. Conservative therapy includes physiotherapy and jaw-mobilizing devices such as tongue depressors, TheraBite, Dynasplint, or similar appliances [37,38]. Early intervention and long-term adherence are essential to prevent irreversible functional impairment.

Neurotoxicity

Chemotherapy-induced neurotoxicity may cause diffuse head and neck pain that mimics odontogenic origin despite normal clinical and radiographic findings, occasionally showing periodontal ligament thickening in vital teeth [9]. Neurotoxic agents such as vincristine and vinblastine can induce transient mandibular pain, while delayed dental hypersensitivity may respond to topical fluorides or desensitizing toothpastes [2].

Oral hyperpigmentation (Melanosis)

Imatinib therapy may cause reversible, dose-related pigmentation changes of the oral mucosa and skin. This effect is attributed to modulation of the c-kit tyrosine kinase pathway, which regulates melanin production in oral mesenchymal tissues. Bluish-brown pigmentation has been reported on the hard palate, gingiva, teeth, and perioral areas [57].

Long term follow-up

Regular follow up include: Oral cancer recurrence surveillance, detection of second primary tumor, caries risk assessment, periodontal evaluation, prothesis maintenance, oral hygiene reinforcement. Suggested follow up schedule –

- Every 1-3 months during the first year
- Every 2-4 months in the second year
- Every 4-6 months during 3-5 years
- Annually thereafter, or as clinically indicated.

Conclusion

Oral health care is a vital component of comprehensive cancer management, particularly as improved survival rates have increased the prevalence of long-term treatment-related oral complications. Conditions such as mucositis, xerostomia, radiation caries, candidiasis, osteoradionecrosis, trismus, and dysphagia can significantly affect function, nutrition, aesthetics, and quality of life.

Early and continuous dental involvement—especially prior to radiotherapy, antiresorptive or antiangiogenic therapy, and hematopoietic stem cell transplantation—is essential for risk assessment, prevention, and reduction of treatment-related morbidity. Individualized preventive strategies, including fluoride therapy, salivary management, dietary counselling, and patient education, play a key role in maintaining oral health during survivorship.

Optimal care of oncology patients relies on effective interdisciplinary collaboration between dental professionals and the wider oncology multidisciplinary team. The integration of evidence-based protocols ensures standardized, high-quality care. Overall, dental oncologists and the dental team have a crucial role in prevention, early detection, and management of oral complications, thereby supporting functional rehabilitation and improving long-term outcomes for cancer patients.

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