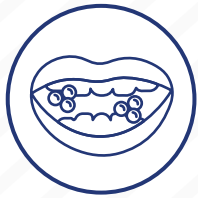


Preventive and therapeutic approaches



Mouth cancer can have a profound and long-term impact on the oral health and quality of life of affected individuals and their families¹

Treatment modalities include:²



Surgery



Radiotherapy



Chemotherapy



Combination of modalities

! The treatment itself can have permanent and life-altering consequences for patients with mouth cancer¹

Physical impact¹



Xerostomia (dry mouth)



Speech impairment



Disfigurement



Loss of teeth and masticatory function



Inability to taste or enjoy food



Long-term risk of osteomyelitis



Intensely sore mouth or mucositis



Nausea



Difficulty in opening mouth and swallowing



Pain and discomfort at the surgical site or other areas from where tissue has been harvested for repair



Fatigue

Psychosocial impact¹



Lowered self-esteem due to appearance



Disturbed sleep



Financial difficulties and unemployment due to sickness



Impaired social interactions



Anxiety and depression



Treatments of mouth cancer can exacerbate existing oral problems^{1,2}



Unavoidable oral complications following treatments can impair patients' normal functioning and quality of life¹

Early prophylaxis and timely treatment of oral problems can reduce the subsequent need for advanced dental treatments¹

A multidisciplinary team which integrates the expertise of various specialists plays a key role in the management of patients with mouth cancer³



- Medical oncologists
- Radiotherapists
- Speech therapists
- Pathologists
- Nurse specialists
- Psychologists
- Radiologists
- Dieticians
- Dental hygienists/therapists
- Surgeons
- Prosthodontists*

*also referred to as restorative dental specialists

The quality of life of mouth cancer survivors depends largely on their access to the dental team and other specialists

Measures to mitigate the long-term impacts of some mouth cancer treatment-related complications⁵



Xerostomia
(dry mouth)

Regular sipping or spraying of water/artificial saliva, and use of xylitol supplements help to moisturise the mouth and balance salivary pH



Dysphagia
(difficulty swallowing)

Support by dietician and speech therapists to improve swallowing ability, and selection of appropriate foods and drinks



Dysphasia
(difficulty speaking)

Support by speech therapists and physiotherapists to improve muscle strength and function



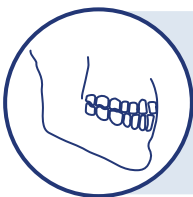
Pain

Comprehensive pain assessment, and medical and non-medical (physiotherapy and supportive) pain management strategies



Osteoradionecrosis

Dietary modifications, hyperbaric oxygen therapy, laser photobiomodulation, and minimally invasive dental treatments



Trismus
(stiff jaw)

Physiotherapy and adaptations for dental treatments



Addressing oral problems prior to the initiation of cancer treatment can minimise the intensity of treatment-induced complications

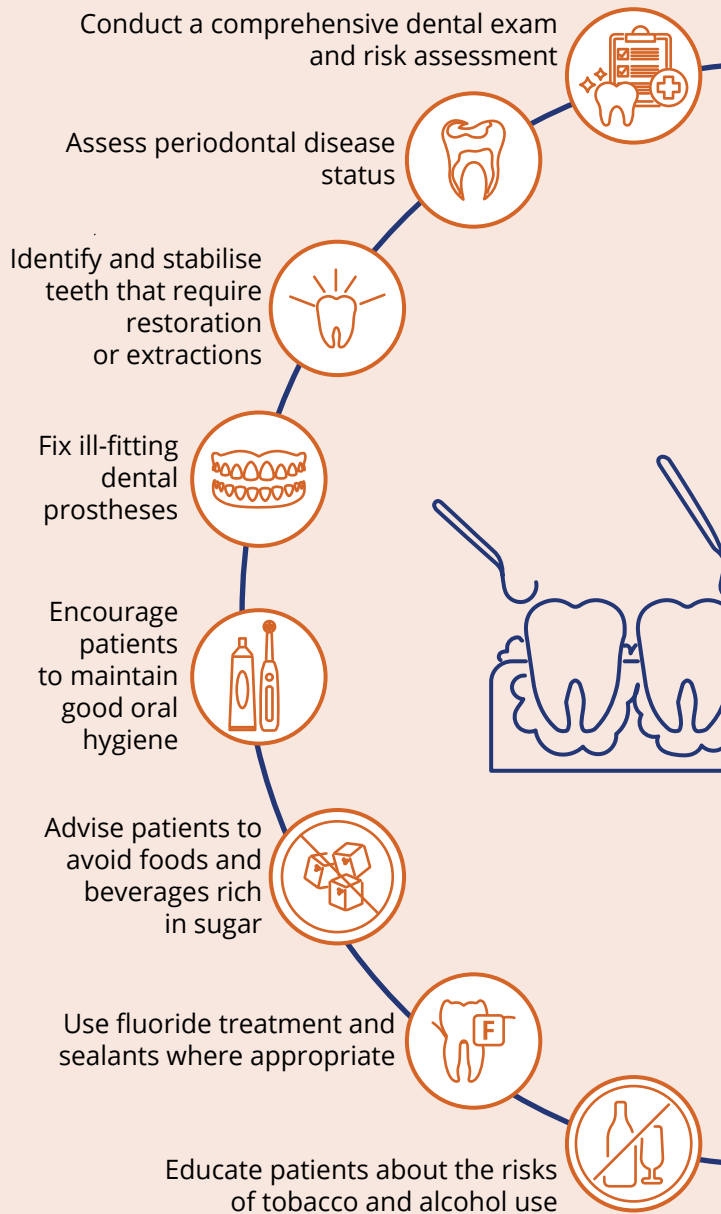
Challenges in oral care following cancer treatments¹⁻⁴

- ! Radiotherapy results in stiffness of the jaw and difficulties in opening the mouth
- ! Maintaining dental hygiene can be challenging due to poor access to the oral cavity
- ! Increased sensitivity to oral care products
- ! Difficulty in wearing or removing dentures

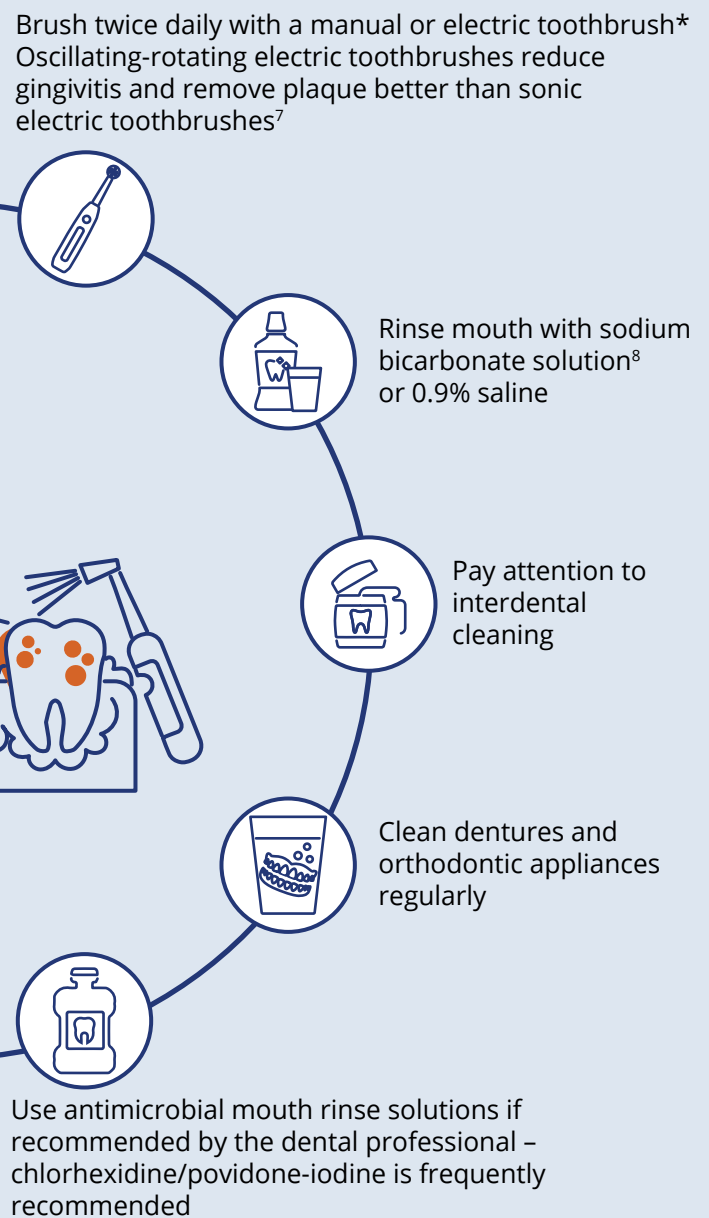


Management of oral problems and complications in patients with mouth cancer can be extremely challenging and requires a comprehensive approach

Recommendations for dental professionals and hygienists⁴⁻⁶



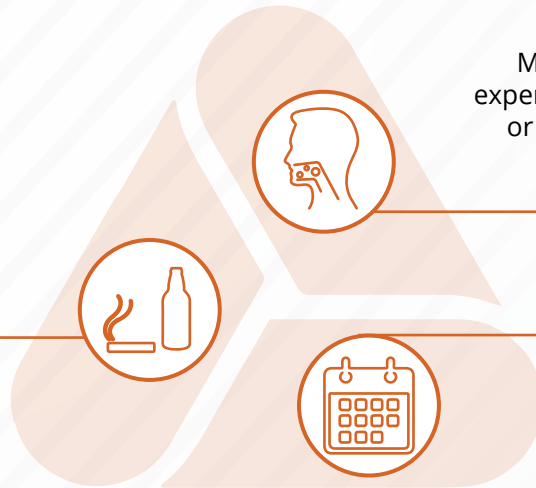
Recommendations for patients⁴⁻⁶



*Electric toothbrushes may be easier to use for the maintenance of good oral hygiene in mouth cancer patients

Risk of recurrence and new malignancies in mouth cancer survivors

Prolonged exposure to cariogenic compounds, including cigarette smoke and alcohol, is associated with an increased risk of developing additional primary tumours^{5,8}



Mouth cancer survivors may experience locoregional recurrence or a second primary tumour^{5,8}

The risk of recurrence is the highest in the first two years after treatment of mouth cancer and reduces significantly after five years^{5,8}

A personalised and patient-centred follow-up schedule can improve adherence and outcomes in comparison to a generalised approach⁹



Risk-based assessment

- Intensified follow-up for high-risk patients
- De-intensified follow-up for low-risk patients
- Understanding the origin of disease (etiology)



Patient education regarding symptoms and health consequences of the disease and treatment



Effective surveillance of specific areas where cancer may recur or where new cancer may emerge



Incorporates patient preferences

- Treatment and the responses of the patients
- Patient-specific features




Facilitates remote consultations when needed



Accounts for clinical and socioeconomic patient-specific features

Routine follow-up can aid in the timely detection of recurrent or new cancer, and thereby, improve patient outcomes

Key message

 **An individualised and multidisciplinary treatment approach can aid the prevention and treatment of oral complications following the treatment of mouth cancer, and help improve patients' outcomes and quality of life**

References:

1. Lewis, P. (2023). The early detection of mouth cancer: An initiative for the whole dental team. *Care of Head and Neck Cancer Patients for Dental Hygienists and Dental Therapists*, 1–13.
2. Barry, L. (2023). Mental health and well-being during treatment. *Care of Head and Neck Cancer Patients for Dental Hygienists and Dental Therapists*, 169–170.
3. Harding, J. J. (Ed.). (2023). *Care of Head and Neck Cancer Patients for Dental Hygienists and Dental Therapists*. Wiley Blackwell.
4. Harding, J. J. (2023). Mouth care and quality of life for patients living with head and neck cancer. *Care of Head and Neck Cancer Patients for Dental Hygienists and Dental Therapists*, 218–230.
5. https://www.cancer.gov/about-cancer/treatment/side-effects/mouth-throat/oral-complications-hp-pdq#_907
6. Lanzetti, J., Finotti, F., Savarino, M., Gassino, G., Dell'Acqua, A., & Erovigni, F. (2023). Management of oral hygiene in head-neck cancer patients undergoing oncological surgery and radiotherapy: a systematic review. *Dentistry Journal*, 11(3)
7. Adam, R., Ram Goyal, C., Qaqish, J., & Grender, J. (2020). Evaluation of an oscillating-rotating toothbrush with microvibrations versus a sonic toothbrush for the reduction of plaque and gingivitis: results from a randomized controlled trial. *International Dental Journal*, 70, S16–S21.
8. <https://www.cancer.gov/about-cancer/treatment/side-effects/mouth-throat/oral-complications-hp-pdq>
9. Brands, M. T., Verbeek, A., Geurts, S., & Merckx, M. A. (2021). Follow-up after oral cancer treatment—transition to a personalized approach. *Journal of Oral Pathology & Medicine*, 50(5), 429–434

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