



ORAL CANCER FACT SHEET

Oral Cancer

- Oral cancer can develop in any part of the oral cavity (the mouth and lips) or the pharynx (the back of the mouth that connects the mouth to the nose and the throat).
- Oral cancers may begin in the tongue, the floor of the mouth and the roof of the mouth.
- Almost all oral cancers begin in the lining that covers the surfaces of the mouth, tongue and lips.

Risk factors

- Smoking
 - Tobacco use accounts for most cases of oral cancer.
 - Heavy smokers are most at risk.
- Alcohol
 - People who drink alcohol are more likely to develop oral cancer than people who don't drink.
 - The risk is even higher if the person both drinks alcohol and smokes.
- Sun exposure
 - Cancer of the lip can be caused by exposure to the sun.
- A personal history of head and neck cancer
 - People who have had head and neck cancer are at increased risk.
- Ethnicity
 - Some cancers are linked to certain ethnic groups, e.g., nasopharyngeal cancers in Southern Chinese
- Being Overweight
 - This is related to most form of cancers, e.g. breast cancer
- Certain Food exposure
 - Salt-cured food e.g. salted fish

Symptoms

- Patches inside the mouth or on the lips that are white, a mixture of red and white, or red
- A sore on the lip or in the mouth that won't heal
- Bleeding in the mouth
- Loose teeth
- Difficulty or pain when swallowing
- Difficulty wearing dentures
- A lump in the neck
- An earache
- Voice change
- Unintentional weight loss in a short period of time
- Sudden onset hearing problems

Diagnosis

- The mouth and throat is checked for red or white patches, lumps, swelling, or other problems.
- The oral examination includes:
 - Looking carefully at the roof of the mouth, back of the throat and insides of the cheeks and lips.
 - Checking the sides and underneath of the tongue
 - Checking the floor of the mouth and lymph nodes in the neck
- If the examination shows an abnormal area, a small sample of a tissue may be removed under local anaesthesia and checked under a microscope for cancer cells.
- Imaging: CT scan, MRI, and PET scan may show cancers

Treatment

- Surgical excision of the tumour is usually recommended if the tumour is small enough.
- Radiation therapy is often used in conjunction with surgery, or if the tumour is inoperable.
- Chemotherapy is commonly used for more advanced tumours, often in combination with radiotherapy and surgery.
- Following treatment, rehabilitation may be necessary to improve daily function e.g. chewing, swallowing, and speech.

Oral Care before Treatment

- Oral conditions that may not affect healthy people may become complicated problems after cancer treatment, which may be difficult and expensive to treat.
- A pre-treatment oral evaluation can help identify potential problems
- Surgical treatments should be planned together with the post-treatment rehabilitation
- A thorough examination of hard and soft tissues, as well as X-rays is carried out to detect possible sources of infection.
- Dentures and appliances will be evaluated for comfort and fit.
- Dental work should be performed prior to the initiation of radiation therapy to allow healing.
- Special brushing and flossing techniques, mouth rinses, and other approaches to keeping the mouth moist and clean to reduce the risk of infection and pain.

Oral Care during Treatment

- For patients undergoing chemotherapy
 - Dental consultation may be appropriate should there be a fever of unknown origin as it may be related to an oral infection.
 - If oral surgery is required, it should be performed before or in between chemotherapy so that there is enough time for healing.
- For patients undergoing radiation therapy and chemotherapy
 - Infected teeth within the radiation field may cause bone necrosis (bone death) after the radiation treatment and the jawbone becomes chronically exposed and unhealing.
 - As ulcerations and dry tissues are prone to infection, the dentist will need to check for and treat infections as and when necessary.
 - Foods that irritate sore tissues or cause dental decay should be avoided.
 - Fibrosis may develop if the chewing muscles are in the direct field of radiation. This may severely limit the oral opening for food and/or future dental treatment. The dentist will teach the patient how to exercise and stretch these muscles properly.

Oral Care after Treatment

- Almost all patients who have radiation therapy to the head and neck develop oral side effects, including:
 - Dry mouth and difficulty swallowing
 - Patients need to sip water often and to use liquids to soften or thin foods.
 - Sugarless gum or sugar-free hard candies can be used to help stimulate saliva flow.
 - A commercial oral lubricant (saliva substitute) can be used.
 - A saliva stimulant may be prescribed when appropriate.
 - Tooth decay
 - Radiation can cause major tooth decay problems. If the tooth needs to be extracted, dentures or dental implants may be required.
 - Sore or bleeding gums
 - Brushing and flossing teeth needs to be done gently with areas that are sore or bleeding avoided.
 - Infection
 - Infection and sores might develop even after treatment is completed and will need to be monitored by a dentist.
 - Denture problems
 - Radiation therapy can change the tissues in the mouth so that dentures do not fit anymore. After the tissues heal completely and the mouth is no longer sore, dentures might need to be replaced or refitted by a dentist.