Mouth cancer

Summary

- Symptoms of mouth cancer include a persistent mass, ulcer or blood blister inside the mouth.
- The most common sites are the lips, tongue and floor of the mouth.
- Tobacco use and heavy drinking are known risk factors.

About 600 people in Victoria are diagnosed with cancer of the mouth, nose or throat each year. Mouth cancer usually starts in the cells lining the mouth. The most common sites are the lips, tongue and floor of the mouth, but cancer can also originate in the gums, cheeks, roof of the mouth, hard and soft palate, tonsils and salivary glands. People over the age of 45 years are at increased risk, with men twice as likely as women to develop these types of cancers.

Smoking increases the risk of mouth cancer six-fold. The location of the cancer seems to depend on the usage of the tobacco product – for example, a person who habitually tucks plugs of chewing tobacco into their left cheek may be prone to cancer of that cheek. Heavy alcohol consumption increases the risk of mouth cancer even more. Mouth cancer is easily cured if treated in its earlier stages, but around half of patients don’t consult with their doctor until their disease is well advanced.

Symptoms of mouth cancer

The symptoms of mouth cancer can include:

- A visible mass or lump that may or may not be painful.
- An ulcer that won’t heal.
- A persistent blood blister.
- Bleeding from the mass or ulcer.
- Loss of sensation anywhere in the mouth.
- Trouble swallowing.
- Impaired tongue mobility.
- Difficulty moving the jaw.
- Speech changes, such as slurring or lack of clarity.
- Loose teeth and/or sore gums.
- Altered taste.
- Swollen lymph glands.

Mouth cancer can spread

The membranes of the mouth, nose and throat are lined with flat, firm cells called squamous cells. Most mouth cancers originate in these surface cells.

Without treatment, squamous cell carcinoma can burrow into the deeper tissue layers, including muscle and bone, and spread to nearby structures such as the throat or lymph glands of the neck. Mouth cancer can migrate (metastasise) to other parts of the body if it accesses the bloodstream or lymphatic system.
Risk factors

The exact cause of mouth cancer is unknown, although tobacco products are thought to play a significant role in about 80 per cent of cases. Risk factors may include:

- Tobacco use
- Regular and heavy alcohol consumption
- Advancing age
- Sun exposure
- Poor diet
- Poor oral hygiene
- Gum disease
- Habitual chewing of the lips or cheeks
- Irritants, such as breathing in smoky, or constantly polluted, atmospheres
- Leukoplakia (light-coloured patches of atypical cells inside the mouth)
- Herpes simplex infection (cold sores)
- Human papilloma virus infection (warts)
- Family history of cancer (genetic makeup).

Diagnosis methods

Mouth cancer is diagnosed using a number of tests including:

- Medical history
- Physical examination
- Biopsy (a sample of suspect tissue is removed for examination in a laboratory)
- X-rays
- Ultrasound
- CT scan
- MRI (magnetic resonance imaging) scan
- PET (position emission tomography) scan
- Simultaneous MRI-PET scans.

Treatment options

Treatment depends on the size, type and location of the cancer and whether it has spread, but can include:

- **Surgery** - the tumour is surgically removed, if small. The lymph glands on the affected side may also be removed if the tumour extends into these.
- **Radiation therapy** - small, precise doses of ionising radiation target and destroy cancer cells. This type of treatment is often all that's needed for small, localised cancers.
- **Chemotherapy** - the use of cancer-killing drugs, often in combination with surgery and/or radiotherapy. Chemotherapy may sometimes be used to shrink a tumour before surgery.
- **Multi-modal treatments** - Surgery on larger tumours may be followed with radiation therapy. Chemoradiotherapy may also be used.
- **Long term monitoring** – this may include regular oral examinations and occasional X-rays to make sure the cancer hasn’t come back.
- **Therapy** – this may include speech therapy, dietary advice and regular medical follow-up. Clinical psychologists, social workers and counsellors can also help people come to terms with the post-operative changes to their lives and appearance.

Side effects of treatment
Depending on the size, type and location of the cancer, and the treatments used, side effects can include:

- **Tooth loss** – if loose or bad teeth are left in place, then there is a danger that radiotherapy treatment will result in osteoradionecrosis (destruction of the jaw bone), so any bad teeth need to be removed before treatment. Dentures can then be fitted, once the cancer treatment is finished.

- **Need for prostheses** – in some cases, diseased bone (such as parts of the jaw) have to be removed and replaced with prosthetic devices. In severe cases where swallowing is troublesome, the person may have to be fed indirectly, either via the nose (naso-gastric tube) or directly into the stomach (gastrostomy tube).

- **Scarring and deformity** – to make sure that no cancerous cells remain, some healthy tissue bordering the tumour must also be removed during surgery. The excision of a large tumour can cause substantial scarring and deformity. Surgery to the tongue, for example, may cause permanent changes to speech and swallowing. Sometimes skin or tissue grafts from other parts of the body are used to help reconstruct the face and the structures of the mouth.

- **Damage to salivary glands** – radiation therapy can harm the salivary glands and reduce their output of saliva. This causes a permanently dry mouth (xerostomia). Management strategies can include taking medication to increase the amount of saliva produced, or regularly using a prescribed gel or spray of artificial saliva preparations.

- **Infections** – most people who have undergone radiation therapy for mouth cancer have an increased susceptibility to mouth infections such as *Candida albicans* or ‘thrush’. Medication helps alleviate this problem.

- **Nausea** – some of the many short-term side effects of chemotherapy include nausea, vomiting and hair loss.

**Palliative care**

Sometimes, the cancer is too advanced and a cure isn't possible. Palliative care is not a cure, but aims to manage pain and reduce the severity of symptoms. Some of the options may include:

- Individually tailored pain management, developed in consultation with the person's doctors and palliative care experts.
- Pain-killing drugs, such as paracetamol and opioid drugs, chosen to suit individual patients and to minimise side effects.
- Radiotherapy, surgery, hormone therapy and chemotherapy may also relieve pain, if these treatments shrink the tumour size.
- Artificial saliva preparations or drugs to increase saliva production can help relieve the discomfort of a dry mouth.
- Psychological, spiritual and social counselling to help the person (and family members) come to terms with their terminal condition.
- Palliative care can be provided at home.

**Where to get help**

- Your doctor
- The Cancer Council Victoria, Cancer Information and Support Service Tel. 131 120
- Peter MacCallum Cancer Centre Tel. (03) 9656 1111
- Speech Pathology Association of Victoria Tel. (03) 9462 4899

**Things to remember**

- Symptoms of mouth cancer include a persistent mass, ulcer or blood blister inside the mouth.
- The most common sites are the lips, tongue and floor of the mouth.
- Tobacco use and heavy drinking are known risk factors.