

ORAL CANCER

**Richard A. Dendy, Consultant in Oral and Maxillo-Facial Surgery
Lancaster and South Cumbria Hospitals**

Cancers of the oral cavity and surrounding structures constitute approximately 3% of malignancies in the Lancaster area, the majority of which are squamous cell carcinomas. Although they are relatively uncommon, they can be very distressing to patients and relatives alike. It is important to note that a proportion of squamous cell carcinomas are preceded by visible premalignant lesions, and these can be eliminated. In addition, early cancers are more easily treated.

SYMPTOMS AND SIGNS

Small squamous cell carcinomas often present as painless papillomatous nodules but more advanced tumours form ulcers which become painful as they infiltrate surrounding structures. Advanced tumours may interfere with talking and eating. Occasionally the first sign is that of an enlarged lymph node in the neck.



Fig 1 – Carcinoma on right side of tongue

AETIOLOGY

Smoking: The use of tobacco products is believed to increase the risk of developing oral cancer by a factor of fifteen in heavy smokers although malignant lesions in the mouth have not increased in incidence to the same extent as lung cancer. The very high incidence of oral cancer in the Indian subcontinent is probably caused by betel nut chewing.

Alcohol: Excess drinking, especially of spirits, doubles the likelihood of cancer and this is compounded by smoking. It seems that poorly refined spirits are particularly liable to induce cancer. Excess alcohol and tobacco in combination appear to have a synergic effect.

Leukoplakia: This is the most common precancerous lesion and approximately 10% progress to malignancy. The floor of the mouth is particularly prone to develop

carcinomas in pre-existing white patches possibly due to the gutter below the tongue acting as a sump which holds carcinogens.

Other factors: Chronic trauma and sepsis have been blamed in the past and many patients have poor oral hygiene. Lichen planus of long standing, particularly if there is marked erosion, and patients who are immunosuppressed are at higher risk.

Secondary tumours may arise in previously irradiated tissues.

In general, tumours in the anterior part of the mouth have a better prognosis than those further back.

PREMALIGNANT LESIONS

White patches should be viewed with suspicion, especially those with a red speckled appearance, and these should all be biopsied to exclude dysplastic changes in the cells. Dental surgeons are in a particularly good position to screen their patients during six-monthly check-ups and they should refer these patients to hospital if they are not familiar with biopsy technique. In general, an ulcer that does not start to heal within two weeks should be biopsied.

BIOPSY

Most premalignant and malignant lesions can be biopsied under local anaesthetic as an outpatient although general anaesthesia may be required for tumours around the pharynx and an examination under general anaesthetic (EUA) helps to estimate the extent of large tumours.

Surgical biopsy can be supplemented by fine-needle aspiration of neck lumps, plane radiography, isotope or CT scanning. MR scanning is available at present in Manchester.

TREATMENT

Head and neck cancers are usually treated by radiotherapy, surgery or a combination of the two. Because of this, a conjoint clinic was set up involving radiotherapists from the Christie Hospital in Manchester and local ENT and oral surgeons which is held on the third Wednesday afternoon of each month at Queen Victoria Hospital, Morecambe. Patients with malignancy are diagnosed in outpatient clinics and referred for a joint assessment prior to treatment. In Kendal, patients are seen in individual clinics or referred to Morecambe.

Radiotherapy is carried out at the Christie Hospital. In general, patients are admitted for treatment which may last for up to four weeks, although often they can go home at weekends. The first few days are taken up with assessment and preparation. The treatment is usually by external beam

irradiation but interstitial implants are sometimes used. A shorter course is given for palliation. Towards the end of treatment patients may feel unwell and they often develop a mucositis which can interfere with eating.

SURGERY

Operations are carried out at Queen Victoria Hospital. Although the principal aim is to cure the disease, palliative surgery also has an important role. In general, small tumours do equally well with radiotherapy or surgery and in view of this, the choice of treatment is dictated by the site of the lesion and by the patient's preference. Radiotherapy does not result in tissue loss and is therefore often the first choice although surgery requires less time in hospital. Larger tumours are treated with radiotherapy unless they are invading the bone, in which case neck surgery often gives a better result. Lymph nodes in the neck are involved from above downwards. Surgery is the best method of treatment and involves the removal of all the glands in the neck in a block dissection. Large defects are closed where possible by local or regional flaps. Patients may require feeding by nasogastric intubation.

Medical oncology: At present, cytotoxic drugs have a limited role in the treatment of oral carcinoma. They may help to reduce tumour size pre-operatively and a trial is underway at the Christie Hospital using methotrexate in conjunction with radiotherapy.

Other tumours: A wide range of tumours arise in the major salivary glands surrounding the oral cavity and in the smaller glands inside the mouth. These tumours are of particular interest to the author. They form a spectrum from benign to malignant and are mainly treated by surgery. The more malignant tumours have a tendency to invade extensively and to spread along nerves giving them the reputation of recurring years later. Sarcomas, malignant melanomas and secondary deposits occur occasionally as do lymphomas.

DENTAL TREATMENT

Radiation reduces the tissues' resistance to trauma and infection and may result in a dry mouth. Ideally dental treatment should be completed prior to radiotherapy but there is often not time for this to be done. The aims of dental treatment are to maintain oral hygiene and reduce the incidence of infection and dental caries. The cervical margins of the teeth are particularly susceptible to decay but good oral hygiene and the use of fluoride toothpaste will reduce the risk. Irradiation damages the blood vessels in the bone and makes tissues susceptible to low grade infection. There is a risk of osteoradionecrosis developing if teeth are extracted in the field of irradiation. This results in a low-grade infected process which particularly affects the mandible. Surgery to remove the diseased bone tends to result in the adjacent bone being involved and treatment is confined to the use of antibiotics and the removal of loose sequester. Occasionally a hemi-mandibulectomy is needed. Following surgery, large defects may be present in the mouth or part of the face may be missing and will need to be filled in. The maxillo-facial laboratory at the Royal Lancaster Infirmary constructs intra-oral obturators and facial prostheses for these patients.

Pain relief: Although pain is only a problem in a proportion of these cancers, some patients do suffer a great deal. Beside drug treatment there are a number of pain relieving techniques available such as nerve blocks and the

pain clinic can give a great deal of help with a range of pain-relieving techniques.

Nutrition: The effects of both radiotherapy and surgery may make eating and drinking very difficult and the dietetic department can plan a balanced diet and give advice to the patient both immediately post treatment and over the long term.

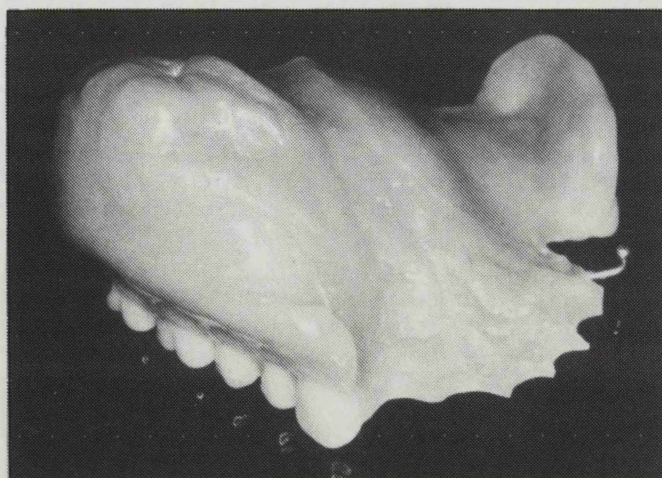


Fig 2 – Obturator (extension) on upper denture after partial resection of right side of upper jaw.

Speech therapy: Occasionally speech may present a problem after partial glossectomy or as a result of nerve damage and therapy can help.

Terminal care: Many cancer patients are looked after at home by their relatives with the help of their general practitioner and community nurses. When required, terminal care is available at both the ENT ward at Queen Victoria Hospital and at St John's Hospice in conjunction with the MacMillan nurses.

CONCLUSION

In rural areas which have a relatively small population, such as Lancaster and Kendal, patients with oral cancer may be referred to several consultants who may only see a few new cases a year. By attending the conjoint clinic the patient can be seen by consultants from three specialties to obtain a consensus as to the most appropriate treatment.

The results of treatment are subject to an audit programme. Patients mostly prefer to be treated as near to their homes as possible and the proposal that a radiotherapy centre should be opened in Lancashire would help further development of the service.

FURTHER READING

Henk JM, Langdon JD. Malignant tumours of the oral cavity. Arnold 1985.

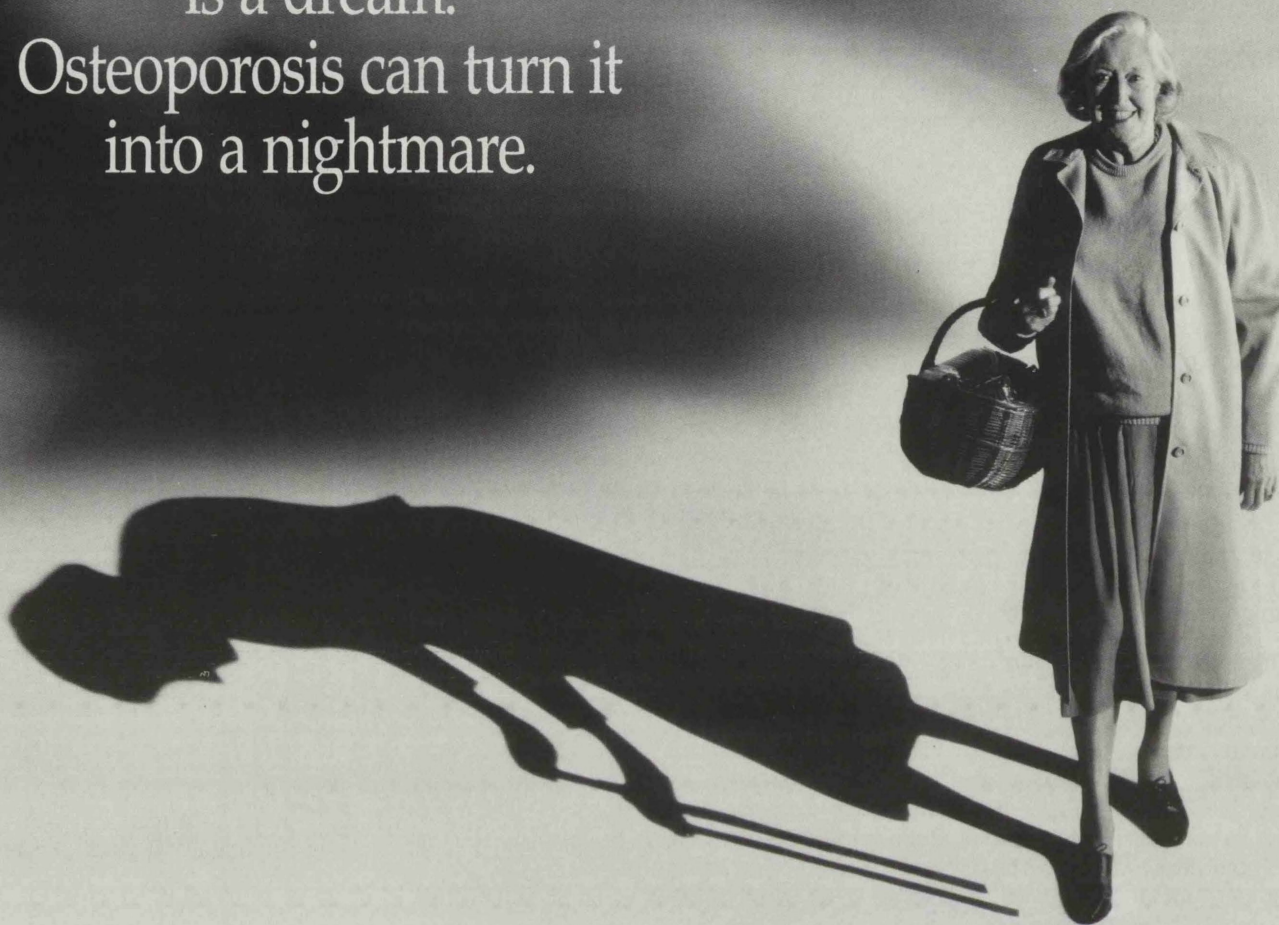
Shklar G. Oral cancer. Saunders 1984.

McIlmurray MB. Lancaster and Kendal cancer services – background, current status and future. Lancaster and Westmorland Medical Journal 1991;1:156-159.

Allen PR. The therapy of chronic non-malignant pain. Lancaster and Westmorland Medical Journal 1991;1:177-181.

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