Can we help prevent mouth cancer?

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Diagnosis and management of patients with oral cancer has developed significantly in the last 30 years with the introduction of more sensitive imaging, refined histological techniques, appropriate staging, improved surgical reconstruction and targeted radiotherapy. However, despite these advances, this disease causes considerable morbidity with often severely compromised function and possible disfigurement. Although head and neck cancer, excluding lymphoma, skin cancer and melanoma, represents only 2.5% of all cancers, it carries with it significant social and economic implications.

Oral squamous cell carcinoma (OSCC) affects any site from the lips throughout the mouth, including buccal mucosa, tongue, floor of mouth, gingiva and palate, posteriorly to the junction with the oropharynx. During 2014, excluding lips, there were 225 new cases of mouth cancer reported to the New Zealand Cancer Registry, the majority of these affecting the tongue.1 Oral SCC presents largely in patients over 45 years of age, however, there has been a steady increase in the incidence of head and neck cancer in younger patients, most likely attributable to exposure to human papilloma virus (HPV).2

Management for patients with a diagnosis of oral cancer will usually involve surgery, and depending on staging may also include postoperative adjunctive external beam radiotherapy to the lower face and neck. Head and neck cancer in New Zealand, as with other cancer types, is managed through multidisciplinary meetings (MDM) ensuring standardisation of care and timeliness of delivery, audited through the Ministry of Health (MoH).3

Function may well be compromised after treatment, with altered speech, difficulties with mastication, swallowing, dry mouth, altered sensation and in advanced cases facial disfigurement. Post-treatment surveillance will usually continue for five years, with recurrence of disease and survival depending on initial stage at diagnosis.

Numerous studies have addressed quality-of-life in these patients, illustrating the burden of not only the diagnosis but the ongoing difficulties these patients may face on a day-to-day basis.4,5 These studies showed that because of the nature of their disease, patients are negatively affected by the different types of surgical treatment for oral and oropharyngeal cancers, with both early and late interrelated effects, and by the side effects of adjuvant therapy. In addition to the difficulty with physical aspects of their rehabilitation after surgery and radiotherapy, these patients often have considerable psychosocial issues.

The paper by Yakin et al6 from the Dunedin Oral Pathology Department provides an excellent review of the risk factors for the development of oral cancer in the New Zealand population and should remind clinicians of the importance of advice on smoking cessation and alcohol intake, with early referral and diagnosis, which can help reduce the impact on quality-of-life for these patients. Dental practitioners in particular have a very important role of vigilance in patients attending for examination and treatment, but medical practitioners should also be alert to the patient who presents with “I’ve got an ulcer in my mouth” or a lump.

It is now accepted that as with cervical cancer, HPV plays a significant role in head and neck cancer. In New Zealand, 75% of oropharyngeal cancers are HPV related.7 PHARMAC has recently recognised this in subsidising vaccination with Gardasil® 9 for both teenage boys and girls, and this editorial strongly supports vaccination against HPV. HPV-associated head and neck cancer carries a much better prognosis than non-HPV.8

Clearly the public health message needs to address the impact of smoking and alcohol, with the finding that smoking increases the risk of oral cancer by a factor of four.
to 20 times, and alcohol drinkers may have a two-and-a-half to five times risk. But the Yakin et al paper highlights another concern with the increasing availability in New Zealand and use of water-pipe smoking (hookah, shisha, nargileh), which is popular among Middle Eastern communities. This method of tobacco use exposes the aerodigestive tract to substantially greater amounts of carcinogens than cigarettes.

Although the number of cases presenting with OSCC are relatively small compared to such cancers as breast, colon or prostate, early diagnosis of oral cancer, as with most cancers, results in improved outcomes. Mouth ulcers not healing within 3–4 weeks may need to be biopsied, and early referral for specialist review indicated. Referrals indicating ‘High Suspicion of Cancer’ (HSC) are red flagged, and according to MoH guidelines should be seen within two weeks.

In the future, the management of oral SCC may follow the same targeted therapy path similar to other cancer types (for example breast and melanoma). For now though, it remains largely a preventable disease which, through education and vaccination, will hopefully see a progressive decline in incidence not only in New Zealand, but globally.

Competing interests:
Nil.

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