The importance of raising awareness of oral cancer amongst our allied healthcare professionals: Case Study by Jessica Mann and Mili Doshi.

Summary

A 79-year-old woman was referred to the special care dental service for a dental assessment prior to starting intravenous bisphosphonate infusions as part of treatment for multiple myeloma. On examination the dental surgeon noticed a localised swelling on the anterior aspect of the tongue dorsum. Following an urgent referral to the head and neck oncology team the lesion was diagnosed as a Stage T1N0M0 squamous cell carcinoma. Treatment involved a partial glossectomy to completely excise the tumour. On review the surgical site had healed satisfactorily and the patient had made a good recovery.

In the previous 12 months the patient had been acutely unwell and been admitted to hospital on several occasions, making contact with multiple healthcare professionals as both an inpatient and outpatient. The carcinoma was symptomatic and highly visible, and could have been diagnosed earlier if a basic oral assessment had been included as part of overall patient assessment.

This case highlights the need to raise awareness of oral conditions amongst healthcare professionals, and the importance on including oral symptoms when taking a history, looking in the mouth when assessing a patient and referring patients who present with oral problems appropriately.

There are many conditions in the mouth that can impact on overall health, the most serious and consequential of these being oral cancer.

Background

Head and neck cancer is the 4th most common cancer in the UK for males and the 12th most common for females (2014) (1). Since the late 1970s oral cancer incidence rates have increased by 92% in the UK and numbers are expected to rise by a further 33% between 2015 – 2035. 1 in 75 men and 1 in 150 women can expect to be diagnosed with oral cancer during their lifetime (2).

The most common intraoral site for head and neck cancer is the tongue, with squamous cell carcinoma of the tongue being the predominant malignancy (3). Currently 5 year survival outcomes for early tongue cancer range between 75-89% (4) however, if oral cancer is diagnosed at a late stage, 5-year survival rates significantly decrease (5).

Case presentation

A 79-year-old female was referred to the special care dental department by the haematology team for a dental assessment prior to commencing intravenous bisphosphonate therapy for a recent diagnosis of multiple myeloma. Intravenous bisphosphonate infusions are associated
with an increased risk of jaw osteonecrosis after invasive dental treatment such as dental
extractions. It is advised that patients have a dental assessment and teeth of poor prognosis
are extracted before commencing IV bisphosphate therapy to avoid complications of wound
healing.

During the appointment the patient mentioned that her tongue was sore and approximately six
months ago she had developed a lump on her tongue.

On examination a 2cm circumferential indurated swelling was present on the anterior dorsum
of the apex of her tongue. The lesion was red and white in colour, and firm and rubbery on
palpation.

A symptomatic tooth was extracted, and an urgent referral was sent to the head and neck
oncology team.

**Investigations and Work Up**

Three days after the referral the patient was seen by the head and neck surgeon. On clinical
examination a provisional diagnosis of a 2cm (T1) squamous cell carcinoma of the anterior
dorsum of the tongue was made.

An incisional biopsy confirmed the initial clinical impression of a moderately differentiated
squamous cell carcinoma.

MRI of the head and neck and a CT imaging of the chest and abdomen was performed. These
did not show any evidence of local or distant metastatic disease

The case was presented to the local head and neck and oncology multidisciplinary team
where it was agreed the tumour should be surgically excised.
Treatment

A partial glossectomy was carried out to excise the tumour with curative intent. The patient’s rivaroxaban was stopped 1 week prior to surgery, all other medication was continued as normal.

Histopathological analysis of the tumour showed clearance with an adequate margin of morphologically normal stratified squamous epithelium.

Outcome and Follow Up

At the review appointment the surgical wound had healed satisfactorily with no significant complications, the patient had unaffected speech and swallowing and was managing to almost eat normally. At a multidisciplinary team review it was decided there was no need for adjunctive treatment such as radiotherapy. The patient then was able to start treatment as originally planned for the multiple myeloma.

Discussion

Oral cancer is increasing worldwide and is the 6\textsuperscript{th} most common cancer overall. Patients typically present with signs of oral cancer at a late or advanced stage where morbidity and mortality rates are high\textsuperscript{(6)}. It is essential that health care professional are aware of the typical signs and symptoms of oral cancer to increase the numbers that are diagnosed earlier. It is important that oral assessment is included as part of patient basic examination when in hospital.

In this case the patient’s cancer was fortuitously discovered before local lymphatic spread and distant metastasis. However it was clear that there were many missed opportunities to detect and refer the lesion at an earlier stage.

The patient was asked why she had not sought prior advice regarding the lesion even though she had noticed it and her tongue was sore. She explained she had been in and out of hospital for the past year attending multiple medical appointments with different medical specialties. She had intended to make an appointment with her dentist when she was better.

On further questioning, the patient said she had mentioned her sore tongue at some of her medical appointments and also whilst an in-patient, but it had been presumed the lesion was a manifestation of her longstanding oral lichen planus that had been diagnosed over 30 years ago. Oral lichen planus presents generally as white patches in the mouth. There is a higher incidence or oral cancer in patients with longstanding lichen planus.

During the past year the patient had been very unwell. She was seen by her general practitioner on numerous occasions, admitted to hospital, and then placed under the care of the gastroenterology team. A diagnosis of diverticular disease resulted in the patient undergoing a laparoscopic high anterior resection under general anesthesia, spending a 7 nights in hospital.
The tumour was not noticed by the surgeon, the anesthetist who had placed an oral tube during intubation, or the nursing staff had detected the tongue lesion. The patient was then under the care of haematology following severe back pain where she was diagnosed with multiple myeloma. Again even though the patient had a comprehensive full body assessment no attention was given to the oral cavity.

There is focus in junior doctor training about the importance of systematic full body assessments for patients but often there is no emphasis on the importance of including assessment of the mouth. The incidence of oral cancer is increasing so it is important to raise awareness for all hospital staff. The earlier the diagnosis the better the prognosis for the patient, late diagnosis and management is associated with increased morbidity and increased problems with speech and swallowing as well as appearance. The best method of detecting oral cancers is by clinical examination by a vigilant front line health worker (7).

Learning Points

- Head and neck cancer incidence is increasing.
- The prognosis for oral cancer is significantly better if diagnosed early.
- It is important for medical staff to include an oral assessment as part of their general assessment.
- If an oral abnormality is detected the patient should be referred appropriately to a head and neck team for assessment.

Figures

Figure 1 – Tongue carcinoma

References