

# Putting the mouth back into the body

Looking in the ‘mouth’ can often provide clues to diagnoses as many systemic conditions have signs and symptoms that commonly present in the oral cavity. Junior doctors have very limited training in oral health at both the undergraduate and postgraduate level (McCann et al, 2005). There is an increasing number of older people in hospitals who present with or develop oral conditions that are not diagnosed and subsequently not managed because of the failure to examine the mouth or ask about oral symptoms, including problems eating. Poisson et al (2014) found that poor oral health is strongly associated with malnutrition and this in turn can affect a patient’s recovery (Gil-Montoya et al, 2015).

Polypharmacy and many systemic diseases can be a cause of acute oral ulceration, candidal infection and xerostomia, which can be debilitating for patients (Dagli and Sharma, 2014). Increasing age also means that patients are more likely to suffer from oral pain as a result of dental causes and the incidence of oral cancer is higher (Jainkittivong et al, 2002).

The King’s Fund found that the majority of hospital inpatients are over 75 years old, with the average age over 80 years. The ageing population poses many medical challenges for health-care providers (Ham et al, 2012). Older patients also face an increased risk of poor oral health. These patients are now more likely to retain their teeth, as a result of positive changes in dental care over the last few decades (Steele and Sullivan, 2011). However, deterioration in oral health can occur when these patients become unable to

manage cleaning their mouths and become susceptible to oral problems. The most common oral conditions among the ageing population are tooth loss, dental decay, periodontitis, xerostomia and acute candidal infection (Thomson and Ma, 2014). These conditions can make eating and drinking difficult for a patient, which can lead to nutritional problems that inhibit recovery from other illnesses (Lean and Wiseman, 2008). Hospitalization is associated with deterioration in oral health and this in turn may lead to hospital-acquired infections, poor nutritional intake, longer hospital stays and increased care costs (Terezakis et al, 2011).

It is not common practice for inpatients to have an oral assessment by doctors or nurses as part of their general assessment, but for patients who cannot communicate or are not eating looking in the mouth is essential. The majority of findings are likely to be common problems such as severe dry mouth or oral thrush, but more sinister lesions may be present, including oral cancer.

## Case studies

The following two cases describe how a failure to look in the mouth of two patients led to delays in diagnosis and overall management. The first case involved an 87-year-old woman with dementia who presented to the emergency department after collapsing with hypoglycaemia at her care home. She was admitted to a medical ward for further investigations and was diagnosed with hypoglycaemia, secondary to a poor oral intake. She was refusing to eat and drink. The patient’s condition deteriorated further, and she underwent several tests to ascertain a definitive diagnosis. Eleven days after admission, her doctor noticed a facial swelling involving her left cheek and lip. The doctor referred the patient for a dental opinion and the letter stated that the teeth seemed in good condition.

When a dental core trainee examined the patient, it was found that she had no teeth, but was wearing dentures. The dentures had not been removed from her mouth since her

admission. When the dentures were removed there was a large hyperplastic ulcerated red and white swelling on the floor of her mouth.

An experienced maxillofacial surgeon was consulted who assessed the patient and advised that the lesion was likely to be a late stage oral carcinoma. The family was informed of this diagnosis and advised that treatment was likely to be palliative. Investigations were requested and ward staff were advised to keep the dentures out of the mouth to allow the swelling and inflammation to reduce. When the patient was reviewed the following week she had started eating and drinking and her blood sugar levels had finally stabilized. When the patient was examined the lesion had resolved. It was concluded that there was no squamous cell carcinoma but a traumatic ulcer caused by a failure to remove the dentures for 11 days. The ulceration and tissue swelling has been so extensive it clinically mimicked a late stage carcinoma. There had been no record of an oral assessment or mouth care in her medical or nursing notes since her admission.

The second case was an 88-year-old woman who was admitted for conservative management of a right inferior pubic rami fracture after a fall. After 12 days, as discharge plans were being made, the patient reported to the nursing staff that her mouth was sore and that she had been experiencing difficulty eating. She was referred to the dental team and when she was assessed a red and white hard swelling (*Figure 1*),

Figure 1. Oral malignant lesion.



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approximately the size of a golf ball, was found on the left lateral border of the tongue. She was seen in the rapid access clinic by an oral and maxillofacial consultant who, after further investigation, diagnosed her with a moderately differentiated squamous cell carcinoma. The patient was given her treatment options, which included invasive surgery. She chose to undergo palliative care. This patient had seen multiple health professionals during her 2-week hospital stay and was complaining of difficulty eating but had not had an oral assessment by nursing or medical staff.

### Signs of oral cancer

Oral cancer should be a differential diagnosis in any patient with an oral lesion that has been present for 3 weeks or longer and is not resolving. Common risk factors are smoking and alcohol abuse. The early stages of oral cancer are usually asymptomatic. The lower lip, floor of the mouth and the tongue are frequent areas of disease. Clinical features of presentation are red and white patches, long-standing ulceration and raised fixed lesions (Bagan and Scully, 2011). Other features associated with oral cancer are:

- Bleeding from the mouth
- Weight loss
- Dysphagia
- Oral pain
- Trismus
- Ear pain
- Not being able to wear prostheses
- Raised lymph nodes
- Unresolving extraction sites.

### Conclusions

Kalisch et al (2012) found that patients identified that mouth care was being frequently missed when being cared for in hospital. Mouth care for vulnerable hospital patients is the responsibility of nurses and doctors. Patients who are not eating or drinking, or are unable to communicate, may have an underlying oral problem. It is necessary to perform an examination of the oral cavity and for it to be documented into the patient's health record. If a patient is not unable to maintain good oral self-care, assistance should be incorporated as part of his/her health-care plan. Assistance with this can be provided through multidisciplinary working between dental professionals and medical staff.

If a suspicious lesion is found or suspected urgent referral through the head and neck cancer pathway should be made or the maxillofacial team within the hospital should be contacted for further advice. **BJHM**

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### KEY POINTS

- Examination of the mouth should be included in the general assessment of a patient by both the medical and nursing team.
- Training in common oral health conditions needs to be part of medical and nursing training.
- Lesions in the oral cavity should be recorded and referred for investigation if they are not resolved within 3 weeks or appear suspicious.
- The mouth can provide signs to help overall patient diagnosis.

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