Delays in referral and treatment of oral cancer

Delays in the referral and treatment of oral squamous cell carcinoma by P. Hollows, P. G. McAndrew, and M. G. Perini
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Objective
To investigate the delays in referral and treatment of patients with oral cancer.

Design
A retrospective study.

Setting
District General Hospital Maxillofacial Unit (MFU).

Subjects
100 consecutive patients with invasive squamous cell carcinoma of the oral cavity referred to Rotherham District General Hospital Maxillofacial Unit (RDGH MFU) between 15th March 1993 and 16th January 1998.

Method
Information collected at the time of referral and treatment was examined retrospectively.

Results
In the patients studied 72% were male, mean age 61.2 years (sd = 11.2, range 37 to 88) and 28% female, mean age 65.6 years (sd = 16.7, range 29 to 90). The majority of referrals were from medical practitioners (56%) and most of the remainder being referred by dental practitioners (36%). The patient delay was found to be the most significant with only 39% presenting within 4 weeks, 29% delayed more than 3 months. There was no statistical correlation between T-stage, alcohol or cigarette use and the patient delay in presentation. Having presented to a medical or dental practitioner 69% were referred within 1 week. There were no significant differences between the T-stages presenting to either medical or dental practitioners or in their delay in referral for each stage. There was no significant difference in age or sex distribution between the populations presenting to general medical or general dental practitioners. General medical practitioners were more likely to refer a patient urgently. Patients referred directly to the MFU were seen quickly but those referred via an indirect route were delayed. 95% of patients were treated within 6 weeks of first consultation.

Conclusion
The majority of practitioners refer patients with oral cancer within 1 week. The most significant delay is that caused by the patient. Some practitioners referred patients to inappropriate specialities, leading to indirect referrals. This results in additional delay in the referral and treatment pathway. Education of the public and primary health care workers should continue. Opportunistic screening of the oral mucosa should be part of the dental check up, with possible targeting of patients at greatest risk, particularly heavy drinkers and smokers.

In brief
- The patient delay is the most significant factor in lateness of diagnosis. This can be improved by education.
- Patients referred by dental and medical practitioners were similar in age, sex and T-stage distribution in our study.
- The practitioner should be aware who is the most appropriate specialist to refer to in their locality. This will reduce the number of indirect referrals, which were shown to delay treatment.
- If suspecting an oral cancer, the practitioner must indicate this in correspondence or by telephoning the specialist directly. This will minimise delays that occur because of inappropriate prioritising of referral letters.

Early detection and referral of cases of suspected oral cancer is an important part of primary dental care. In this paper, as in others, dentists referred a significant number of patients and are in the ideal position to offer 'opportunistic' oral surveillance. This study is set in a busy district general hospital, in which there is a well established maxillofacial unit. It assesses factors causing delay in referral. One hundred consecutive patients were studied, 56% were referred by general medical practitioners and 36% by general dental practitioners. Sixty-nine per cent of patients were referred within 1 week of presentation. There were no significant differences in delay in relation to T stage, indicating that practitioners acted promptly in referring early lesions as well as more advanced tumours which may be easier to diagnose with confidence.

The paper is reassuring about the ability of dental practitioners to diagnose oral cancer. The authors then explore how to improve on this good performance. In this part of the paper there are important practical messages for all.

Despite the speed of referral, only 36% of the letters received by the hospital were graded as urgent on the basis of their content. In an area where significant signs may have benign as well as malignant causes, it is helpful to state clearly that oral cancer is a suspected clinical diagnosis at the time of referral. Telephone calls alert the hospital team to your concern, however, in this study only 11% of referring practitioners telephoned the hospital.

Inappropriate referral was a problem; only 54% of cases in this series were referred directly to the maxillofacial unit. These 'indirect referrals' were a significant cause of delay. Again, familiarity with the local service and appropriate telephone contact can prevent delay.

These messages from the study are practical and, if heeded, can prevent most of the practitioner-related delay reported in the study.

The second major area to be addressed is that of patient delay. Only 39% of patients sought an opinion within 4 weeks of the onset of symptoms and 29% delayed more than 3 months. Patient factors were the most significant cause of delay identified.

Strategies to improve this rely on education, where possible, of all patients. Those at risk can also be specifically advised. In this study only 11% of patients did not smoke or drink alcohol on a regular basis, yet Cowan *et al.* (1995) showed that only 14% of dental practitioners indicated that their records contained information about smoking or drinking habits. Whether or not screening of a high risk population is feasible or cost effective remains to be determined but this study confirms that dental practitioners are well placed to educate, diagnose and refer patients in an effective way.

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