Clinical recommendations for oral cancer screening

Abstracted from

Rethman MP, Carpenter W, Cohen EE, *et al*.
American Dental Association Council on Scientific Affairs Expert Panel on Screening for Oral Squamous Cell Carcinomas.
Evidence-based clinical recommendations regarding screening for oral squamous cell carcinomas.
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Scope and purpose To address the benefits and limitations of oral cancer screening and the use of adjunctive screening aids to visualise and detect potentially malignant and malignant oral lesions. Squamous cell carcinomas of the lips and cancers of the oropharynx (including the posterior one-third of the base of the tongue and the tonsils were excluded.

Methodology A specially convened expert panel evaluated the available evidence which was derived from a systematic search of Medline and the Cochrane Library. Further details about the search are available in a supplement to the published article available on the Journal of the America Dental Association's website (http://jada.ada.org/cgi/content/full/141/5/509). Qualitative synthesis of the data was performed by the panel. Where consensus could not be reached majority voting was employed. Recommendations were reviewed by internal and external scientific experts and organisations. After review recommendations were revised where appropriate and the ADA Council on Scientific Affairs approved the final clinical recommendations.

Review and updating No information provided in article.

Recommendations The key recommendations were all classified as level D being based on grade IV evidence or extrapolated from grade I, II or III evidence using a system based on Shekelle *et al*.[1] The main recommendations can be summarised as:

1) Clinicians should remain alert for signs of potentially malignant lesions or early-stage cancers in all patients while performing routine visual and tactile examinations, particularly for patients who use tobacco or who are heavy consumers of alcohol.
2) For seemingly innocuous lesions, clinicians should follow up in seven to 14 days to confirm persistence after removing any possible cause to reduce the potential for false-positive screening results.
3) For lesions that raise suspicion of cancer or for lesions that persist after removal of a possible cause, clinicians should communicate the potential benefits and risks of early diagnosis. Considerations include the following:
   a) that even suspicious lesions identified during the course of a routine visual and tactile examination may represent false positives;
   b) that clinical confirmation (a second opinion) can be sought from a dental or medical care provider with advanced training and experience in diagnosis of oral mucosal disease so as to reduce the potential for a false positive or false negative oral cancer screening result;
   c) that a malignancy or non-malignancy can be confirmed only via microscopic examination that requires a surgical biopsy;
   d) that a decision to pursue a biopsy to confirm the presence or absence of malignancy should be made in the context of informed consent.
4) Although transepithelial cytology has validity in identifying disaggregated dysplastic cells, the panel suggests surgical biopsy for definitive diagnosis

Research recommendations In all, 15 separate research recommendations were made ranging from determining the prevalence of potentially malignant oral mucosal lesions in the United States to whether the use of adjunctive devices improves patient education and adherence to follow-up care.

Commentary

These recent evidence-based clinical recommendations have been developed by a panel convened by the American Dental Association Council on Scientific Affairs supported in part by the Centers for Disease Control and Prevention, Atlanta. The authors also point out that these are not standards of care, merely clinical recommendations to be integrated with the practitioner's professional judgment and the individual patient's needs and informed preferences. In essence then some *'evidence-based guidance'* (my italics) on which to base your clinical practice.

These recommendations have been developed using a formal structured process along the lines of well known guidance development organisations such as SIGN (www.sign.ac.uk) and NICE (www.nice.org.uk). This paper does provide a good overview of the process, however it lacks some of the additional information that is required to allow the reader to use a detailed appraisal tool such as the AGREE II (Appraisal of Guidelines Research & Evaluation, www.agreetrust.org/resource-centre/agree-ii/) an internationally recognised tool for assessing the quality and reporting of practice guidelines. Some additional information is on the journal of the American Dental Association's website at http://jada.ada.org/cgi/content/full/141/5/509.

The paper clearly presents information on conflict of interests with a number of the expert panel having received funding from commercial companies developing or producing adjunctive screening aids. While this transparency is to be applauded, issues of financial and intellectual conflict of interest in clinical practice guidelines have raised increasing concern and strategies have been advanced for achieving the benefits of using these experts' input without conflicts of interest influencing recommendations.[2] The key recommendations are sensible in light of the evidence that is currently available and they concur with the recently updated Cochrane review on oral cancer screening.[2] It is clear that despite oral cancer being a significant public health problem there is still much that we do not know about

its natural history and there is a dearth of good quality evidence about whether screening or screening programmes can or will be effective. As noted by the UK National Screening Committee (www.screening.nhs.uk/oralcancer), 'the main obstacle to screening was the considerable uncertainty regarding the natural history of the disease and in particular the fact that we are still unable to accurately predict which potentially malignant lesions will progress to cancer.'

Also, those most at risk of developing the condition, i.e. those who smoke and drink to excess, have poor diets and come from the lower socioeconomic groups, are those least likely to attend the dentist regularly. This means that, while as clinicians we need to ensure that patients attending for dental visits have proper examinations of the oral mucosa, we will not see many early oral cancers in our practising lifetimes but we must remain vigilant.

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Practice points

- While the current evidence does not provide support for population screening for oral cancer clinicians should remain alert for signs of potentially malignant lesions or early-stage cancers in all patients while performing routine examinations, particularly for patients who use tobacco or who are heavy consumers of alcohol.

1. Shekelle PG, Woolf SH, Eccles M, Grimshaw J. Clinical guidelines: developing guidelines. *Bri Med J* 1999; **318:** 593-596.
2. Guyatt G, Akl EA, Hirsh J, Kearon C, Crowther M, Gutterman *et al.* The vexing problem of guidelines and conflict of interest: a potential solution. *Ann Intern Med.* 2010; **152:** 738-741. Epub 2010 May 17.
3. Brocklehurst P, Kujan O, Glenny AM, Oliver R, Sloan P, Ogden G, Shepherd S. Screening programmes for the early detection and prevention of oral cancer. Cochrane Database of Systematic Reviews 2010, Issue 11.

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