Another oral cancer clinical guideline – but does it propose changes to dental practice?

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A Commentary on

Oral Cancer guidance. **Lingen MW, Abt E, Agrawal N, Chaturvedi AK, Cohen E, D'Souza G, Gurenlian J, Kalmar JR, Kerr AR, Lambert PM, Patton LL, Sollecito TP, Truelove E, Tampi MP, Urquart O, Banfield L, Carrasco-Labra A.** Evidence-based clinical practice guideline for the evaluation of potentially malignant disorders in the oral cavity: A report of the American Dental Association. *J Am Dent Assoc* 2017; **148:** 712-727.e10. doi: 10.1016/j.adaj.2017.07.032. PubMed PMID: 28958308.

Abstract

Scope and purpose This guideline concerns patients with no lesions, innocuous or nonsuspicious lesions, lesions suspected to be potentially malignant as well as malignant lesions of the oral cavity. The audience for this guideline is health care workers who examine the mouth as well as community dental health co-ordinators and policy makers.

Methodology The Appraisal of Guidelines Research & Evaluation reporting checklist II and the GIN-McMaster Guideline Development Checklist were followed and the guideline is partly informed by systematic reviews and diagnostic test accuracy meta-analyses. Studies assessing patients' values and preferences were also considered. The process of moving from the evidence to decisions and the formulation was guided by GRADE (Grading of Recommendations Assessment, Development and Evaluation).

Review and Updating Updates for this guideline will be conducted every five years or when new emerging evidence indicates a potential change in the recommendation statements from the expert panel. Any updated versions of this guideline will be available at the ADA Center for Evidence-Based Dentistry's website: www.ebd.ada

Recommendations The expert panel developed six conditional recommendations, all based on evidence rated as low to very low quality using GRADE.

1. For patients with a clinically evident oral mucosal lesion with an unknown clinical diagnosis considered to be seemingly innocuous or nonsuspicious of malignancy, or other symptoms, clinicians should follow up periodically to determine the need for further evaluation. If the lesion has not resolved and the clinical diagnosis of a potentially malignant disorder cannot be ruled out, then clinicians should perform a biopsy of the lesion or refer the patient to a specialist.

2. For patients with a clinically evident oral mucosal lesion considered to be suspicious of a potentially malignant or malignant disorder, or other symptoms, clinicians should perform a biopsy of the lesion or provide immediate referral to a specialist.

3. Cytologic adjuncts for the evaluation of potentially malignant disorders among adult patients with clinically evident, seemingly innocuous or suspicious lesions are not recommended. Should a patient decline the clinician's recommendation for performing a biopsy of the lesion or referral to a specialist, the clinician can use a cytologic adjunct to provide additional lesion assessment. A positive or atypical cytologic test result reinforces the need for a biopsy or referral.A negative cytologic test result indicates the need for periodic follow-up of the patient. If the clinician detects persistence or progression of the lesion, immediately performing a biopsy of the lesion or referral to a specialist is indicated.

4. The panel does not recommend autofluorescence, tissue reflectance or vital staining adjuncts for the evaluation of potentially malignant disorders among adult patients with clinically evident, seemingly innocuous or suspicious lesions.

5. The panel suggests that for patients with no clinically evident lesions or symptoms, no further action is necessary at that time.

6. The panel does not recommend commercially available salivary adjuncts for the evaluation of potentially malignant disorders among adult patients with or without clinically evident, seemingly innocuous or suspicious lesions and their use should be considered only in the context of research.

Research recommendations There is a need for better estimation of the prevalence of potentially malignant disorders (PMDs) and oral squamous cell carcinoma (OSCC) in populations with different baseline risks. More information on patients' values and preferences is required as well as studies on the diagnostic test accuracy of cytologic and salivary adjuncts.

GRADE rating 

Commentary

As another Mouth Cancer Action Month in the UK comes to an end,[1] it is worth reflecting on the state of evidence and best practice for early detection of oral cancer. The recent special edition of the *British Dental Journal* provides a good stock-take across the cancer continuum.[2]

As in many countries across the world, oral cavity and oropharyngeal cancer incidence rates are rising and projected to rise in the UK.[3,4,5] That these increases are coupled with high mortality and poor survival[6] – particularly when diagnosed at a late/advanced stage – highlights the need for prevention and early detection/screening to reverse these trends.

A recent review of the evidence for oral cancer screening found that only five of the 20 criteria required by the UK Screening Committee for a national programme were satisfied,[7] recommending more research, but encouraging the continuation of opportunistic screening when patients visit the dental practice.

Data on all patients diagnosed with oral cancer over a year in the Scottish Cancer Registry were recently record-linked to NHS primary care dental care in Scotland.[8] This research found that less than 50% had attended a dental practice in the two years prior to diagnosis. Therefore there needs to be greater efforts for dental practice to reach out and engage those who do not attend dental practices – so that they can have the opportunity for (opportunistic) early detection. But, also for those who do attend dental practices regularly for regular check-up reviews, then it is important for dental teams to follow best evidence-based practice.

There is a raft of international guidelines associated with early detection of oral cancer,[9] and most recently, in 2017, the America Dental Association (ADA), published an update of their guidelines.[10] The intention of this guideline was to provide primary care clinicians with updated recommendations for the management of lesions and suggest a clinical pathway regarding the use of adjunct tools/techniques as triage tools to evaluate lesions in the oral cavity.

The authors conducted a systematic review of multiple databases to identify randomised controlled trials and diagnostic test accuracy studies. Grading of Recommendations Assessment, Development and Evaluation approach[11] was used to assess the certainty in the evidence and to make the recommendations. The evidence used by the guideline included four systematic reviews, two of which were Cochrane reviews, which the authors updated.

The guideline had several recommendations and one good practice statement. The good practice statement was: 'The expert panel suggests that clinicians should obtain an updated medical, social and dental history and perform an intraoral and extraoral conventional visual and tactile examination in all adult patients.' (No quality of evidence rating and no strength of recommendation were assigned to this). The guideline advised that for any suspicious lesion a biopsy or referral to a specialist is the most important recommendation for clinical practice. The recommendations discuss the need for review of lesions and if there is no resolution and the diagnosis of a potentially malignant disorder cannot be ruled out to biopsy the lesion. Additionally, adjuncts such as autofluorescence, tissue reflectance, vital staining, salivary adjuncts are not recommended. Cytologic testing was additionally not recommended, however should a patient decline biopsy or referral to a specialist cytologic testing could be used to provide additional lesion assessment.

We appraised the ADA clinical guideline here using The AGREE II tool,[12] which is an international tool to assess the quality and reporting of practice guidelines. It assesses the methodological rigour and transparency in which a guideline is developed. It consists of 23 questions covering six quality domains - Scope and Purpose, Stakeholder Involvement, Rigour of Development, Clarity of Presentation, Applicability and Editorial Impendence. Individual domains are scored, and an overall assessment is completed.

The overall objective of the guideline was clearly defined; however, the questions were not felt to be specific and could have been improved by using the PICO method. The guideline development group consisted of a number of different professionals, however there was no input from patient representatives or public health consultants. The rigour of development of the guidelines was considered to be strong despite limitations of the evidence available on this topic. The presentation of information was clear and well structured with additional resources such as a chairside guide available on the ADA website for both clinicians and patients. There were no issues detected with editorial independence. Overall, the guideline was well conducted, however the evidence underlying the recommendations was poor. The guideline development group used GRADE framework to assess the risk of bias and this identified the largest limitation of the guideline; the evidence is rated as low to very low. Another limitation of the evidence was the fact this guidance is aimed at primary care clinicians and most studies were conducted in secondary/tertiary care. This highlights the need for further research in the area of oral cancer diagnosis to improve the strength of existing evidence. The guideline confirms current research and strengthens the evidence already available regarding the evaluation of potentially malignant disorders.

The continued focus on updating clinical guidelines for dental practitioners in relation to prevention and early detection of oral cancer is welcome, however, the research base, which these guidelines draw the evidence from has not progressed sufficiently.

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