

by large carious lesions in buccal smooth surface areas and fractured teeth due to increased motor activity. It is important to note that a significant level of osteoporosis has also been reported in a high percentage of methamphetamine abusers.³

Cocaine can result in movement disorder and manifest itself as transient chorea⁴ while heroin can increase the number of decayed, missing and filled teeth.⁵

These patients develop dental caries, inflammation and hyperplasia of gingival, uvulitis, leukoplakia, oral papillomas and tongue carcinoma, and their nutrition is also compromised. Dentists should be aware of the effects of these drugs in dental management.

A. Curto, Spain

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Depression and dental outcomes

Sir, despite the increasingly high prevalence of depression and depressive disorders, there has been a lack of well-conducted observational studies that have examined the associations between depression and adverse dental outcomes. Some of the published studies to date have found associations while others have not. Two studies that observed positive associations are described below. The first, a multivariable analysis of adult patients in India, detected an association between depression and periodontitis, and the authors concluded that depression can be considered an important risk factor for the development of periodontal diseases.¹ The second, a study using self-reported data among patients from a randomised trial at two cancer centres in the US, concluded that depression was associated with non-adherence to therapeutic oral medications in patients with oral cancer.²

While the aforementioned studies have various limitations including cross-sectional designs that limit our ability to make statements of causality between depression

and adverse dental outcomes, they provide initial insights into the associations and the need for further study of them. There are various plausible biological and behavioural pathways by which depression can lead to a worsening of dental outcomes including an increased prevalence of periodontal disease and dental caries.

Our purpose is to draw attention to an understudied area of research. In two recent analyses of the Nationwide Emergency Department Sample we identified associations between the presence of depression and an increased likelihood of hospital admission among older male patients with prostate cancer (in press) and among patients with head and neck cancer (under review). We hypothesised in both analyses that depression would be associated with worsening overall health, as indicated by the need for hospital admission vs. discharge after controlling for possible confounding variables including demographic, hospital and clinical characteristics. Our analyses add to other studies that show associations between depression and worsening health, including oral health. There is a clear need for well-designed prospective studies that examine if depression can lead to an increased incidence of adverse dental outcomes including dental caries and periodontal disease.

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Antimicrobial resistance COMs and OMFSs

Sir, I read with great interest the short communication by Pankhurst *et al.*¹ regarding the role of consultants in oral microbiology (COMs) and the adverse issues faced by the dental profession in light of their dwindling numbers, particularly in relation to inappropriate prescription of antimicrobial agents.

Having worked in oral and maxillofacial surgery (OMFS) units for several years in an on-call capacity, managing patients with acute odontogenic cervicofacial infections is a clinical scenario frequently encountered – no doubt my colleagues in similar

settings will corroborate this anecdotally. The incidence of deep neck space infections from dental causes which require admission to hospital appears to be rising.² While the central tenet of ‘incision and drainage’ firmly holds true, patients with odontogenic infections are invariably prescribed antimicrobials as an adjunct to surgical management. These tend to be of the broad spectrum ilk, prescribed with the arguably misguided intention of ‘covering all bases’.³

As the mainstay of OMFS is in secondary care, there is access to hospital-based medical microbiology teams but I would welcome a greater degree of interprofessional working with OMFS teams and COMs, to update on emerging trends in the microbiology of odontogenic abscesses and on the most suitable empirical antimicrobials. There appears to be a lack of awareness of oral microbiology as a specialty,⁴ and this raises some questions regarding the practicalities of working with OMFS units. With most COMs situated in dental schools how would we ensure that COM advice is available to OMFS units based in district general hospitals, particularly in an out-of-hours situation? This perhaps necessitates development of a network by formally linking with a named COM in a dental school in the first instance.

At a dental undergraduate level and beyond there needs to be greater awareness of the clinical training and scope of practice for COMs. For example, in an established odontogenic infection where a patient subsequently becomes septic would it be appropriate to consult an oral microbiologist for antimicrobial advice, or would we then revert to contacting the hospital’s medical microbiologist? Or indeed is there benefit to be derived from involving all above parties to achieve a favourable outcome for the patient? I would be most interested to hear thoughts from any colleagues.

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