Other journals in brief

A selection of abstracts of clinically relevant papers from other journals. The abstracts on this page have been chosen and edited by **Reena Wadia**.

Tooth wear

Bartlett D, O'Toole S. Tooth wear: Best Evidence Consensus Statement. *J Prosthodont* 2020; DOI: 10.1111/jopr.13312. Online ahead of print.

The impact that tooth wear has on the patient depends on patient characteristics to a greater extent than the severity of wear.

The purpose of this Best Evidence Consensus Statement was to evaluate the impact of wear on teeth. A search updated last in October 2020 using the terms tooth wear, dental erosion, dental abrasion or dental attrition yielded 11,694 results. Limiting the search to clinical trials, cross-sectional investigations, randomised controlled trials, reviews, systematic reviews and meta-analyses yielded 1,769 results. Mechanistic in vitro studies were also added. From the search results, 212 articles were related to the research question and 60 were included. Although tooth wear prevalence is over 30% of the population in early adulthood and increases as individuals age, the impact on the dentition is poorly investigated in longitudinal clinical studies. Wear on teeth can result in alterations in shape and potentially dentine hypersensitivity depending on the aetiology. The process is slow and pulpal death is rare. The impact that tooth wear has on the patient depends on patient characteristics to a greater extent than the severity of wear. Management is often a patient-driven process.

https://doi.org/10.1038/s41415-021-2611-1

Burning mouth syndrome – quality of life

Pereira J V, Normando A G C, Rodrigues-Fernandes C I, Rivera C, Santos-Silva A R, Lopes M A. The impact on quality of life in patients with burning mouth syndrome: a systematic review and meta-analysis. *Oral Surg Oral Med Oral Pathol Oral Radiol* 2020; DOI: 10.1016/j.oooo.2020.11.019. Online ahead of print.

Burning mouth syndrome does affect patients' wellbeing.

The objective of this systematic review was to evaluate the evidence on health-related quality of life (HRQL) and oral health-related quality of life (OHRQL) in patients with burning mouth syndrome (BMS). An electronic search was carried out in March 2020 and included clinical trials, cross-sectional studies and case-control studies. The following databases were screened: Embase, LILACS, PubMed, Web of Science and Scopus. A grey literature search was performed on Google Scholar and ProQuest Dissertations & Theses Global. Thirty-three studies were included, and most presented a low risk of bias. Three meta-analyses were performed based on results of six observational studies and showed worse OHRQL (P <0.0001) and HRQL (P <0.0001) in patients with BMS compared to controls. Patients with BMS reported poor HRQL and poor OHRQL compared to control groups, evidencing that this condition affects patients' wellbeing.

https://doi.org/10.1038/s41415-021-2625-8

OHRQoL and periodontal treatment

Rawlinson A, Vettore M V, Baker S R, Robinson P G. Periodontal treatment, psychological factors and oral health-related quality of life. *J Clin Periodontol* 2020; DOI: 10.1111/jcpe.13405. Online ahead of print.

OHRQoL and periodontal status improved after treatment.

The aim of this study was to determine changes in oral health-related quality of life (OHRQoL) and clinical status after periodontal treatment and the factors predicting these changes. A cohort of 140 patients with chronic periodontitis receiving non-surgical treatment were included. Participant self-completed questionnaires were utilised. Relationships between OHRQoL, clinical data, and individual and environmental characteristics were analysed with structural equation modelling guided by the Wilson and Cleary model. OHRQoL and the periodontal status improved after treatment. Greater sense of coherence and age, better periodontal status, lower DMFT and being male predicted better OHRQoL after treatment. Better task-specific self-efficacy and self-esteem, but worse plaque score, predicted better end periodontal status. https://doi.org/10.1038/s41415-021-2624-9

Carotid artery calcification on dental radiographs

Lim L Z, Koh P S F, Cao S, Wong R C W. Can carotid artery calcifications on dental radiographs predict adverse vascular events? A systematic review. *Clin Oral Investig* 2020; DOI: 10.1007/s00784-020-03696-5. Online ahead of print.

Dentists must be able to recognise carotid artery calcifications on panoramic radiographs and make appropriate referrals.

This study investigated the predictive value of carotid artery calcifications (CACs) seen on dental imaging for future adverse events related to cerebrovascular and cardiovascular diseases. Electronic databases and selected grey literature were searched. Outcomes included stroke, transient ischaemic attack (TIA), myocardial infarction (MI), angina, heart failure, future interventional revascularisation procedures and death. Five studies were selected from 1,011 records. Results were heterogeneous but showed that patients with CACs on panoramic radiographs (PANs) were more likely to experience strokes, TIA, MI and future revascularisation procedures compared to control groups. The differences between groups were not all found to be statistically significant. Bilateral vessel-outlining CACs were an independent risk marker for future vascular events. Patients who are not currently being managed for cardiovascular risk factors should be referred for further evaluation. Those already being treated for atherosclerosis may not benefit from additional investigations. The authors concluded the evidence for the predictive value of CACs on PANs for adverse future vascular events is equivocal but can help to identify at-risk patients who require further evaluation.

https://doi.org/10.1038/s41415-021-2626-7