

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.

Hyposalivation in the elderly

Pina G M S, Mota Carvalho R, Silva B S F, Almeida F T. Prevalence of hyposalivation in older people: A systematic review and meta-analysis. *Gerodontology* 2020; DOI: 10.1111/ger.12497. Online ahead of print.

The overall prevalence of hyposalivation in older people (aged ≥ 60 years) is 33%.

Hyposalivation can cause transient or permanent problems that could affect oral health. The proportion of elders is increasing worldwide, and hyposalivation has been associated with the ageing process. This study aimed to determine the prevalence of hyposalivation in older people (aged ≥ 60 years). Six electronic databases were searched. Thirteen studies and a total of 3,885 individuals were included. The meta-analysis showed an overall hyposalivation prevalence of 33%. The prevalence of hyposalivation for unstimulated and stimulated methods was 33% and 30% respectively. Most of the studies were evaluated as low risk of bias. Some study limitations were related to the observational studies' potential risk of bias, and different criteria to measure saliva flow rate.

<https://doi.org/10.1038/s41415-020-2284-1>

Short vs standard implants with sinus floor elevation

Vetromilla B M, Mazzetti T, Pereira-Cenci T. Short versus standard implants associated with sinus floor elevation: An umbrella review of meta-analyses of multiple outcomes. *J Prosthet Dent* 2020; DOI: 10.1016/j.prosdent.2020.08.002. Online ahead of print.

Short implants had a better or equal performance compared with standard implants for all outcomes.

Bone loss in the edentulous posterior maxilla complicates dental implant placement. This review evaluated the existing evidence for short and standard implants in association with sinus floor elevation regarding implant survival, marginal bone loss, and complications by using an umbrella review of the evidence across meta-analysis of interventional studies. Medline, Scopus, and Cochrane Library were searched to identify systematic reviews and meta-analyses. From 2011 studies, seven systematic reviews were included as per the eligibility criteria. There was no statistically significant difference between groups for implant survival, and the qualitative analysis did not show differences for prosthetic outcomes. Standard implants were associated with fewer prosthetic complications in the quantitative analysis, but no difference was found between the treatments in the qualitative analysis. Short implants showed reduced marginal bone loss and better biologic outcomes. Patient satisfaction was similar for both groups, whereas costs and time for the procedure favoured short implants. The quality of the evidence was graded as 'critically low' and 'low'. There was a high certainty of evidence for implant survival, whereas marginal bone loss and complications had moderate certainty.

<https://doi.org/10.1038/s41415-020-2293-0>

Alveolar ridge preservation

Clementini M, Castelluzzo W, Ciaravino V. The effect of immediate implant placement on alveolar ridge preservation compared to spontaneous healing after tooth extraction: soft tissue findings from a randomized controlled clinical trial. *J Clin Periodontol* 2020. DOI: 10.1111/jcpe.13369. Online ahead of print.

A preservation technique with DBBM-CM, with or without immediate implant placement, did not reduce the horizontal linear and volumetric changes at the buccal soft tissue profile.

This study explored soft tissue dimensional changes and relative differences in soft and hard tissue volumes 4 months after single tooth extraction and three different treatment modalities: spontaneous healing (SH) and alveolar ridge preservation by means of a deproteinised bovine bone mineral and a collagen matrix, with (IMPL/DBBM/CM) or without (DBBM/CM) immediate implant placement. Stereolithography (STL) files from study casts obtained at baseline and after 4 months were matched to calculate buccal soft tissues linear and volumetric changes. DICOM file from CBCTs were superimposed to STL files allowing the evaluation of soft tissue thickness. Mean horizontal reduction accounted for 1.46, 0.85 (DBBM-CM) and 0.84 IMPL/DBBM-CM, with no statistical differences. Soft tissue thickness had a significant mean increase of 0.95 for SH group, compared to a non-significant mean decrease for DBBM-CM and IMPL/DBBM-CM group.

<https://doi.org/10.1038/s41415-020-2292-1>

CBCT examination in endodontic cases

Bhatt M, MacDonald D, Coil J, Chehroudi B, Esteves A. Clinical decision making and importance of the AAOMR/AAE position statement for CBCT examination in endodontic cases. *Int Endod J* 2020; DOI: 10.1111/iej.13397. Online ahead of print.

CBCT examinations were prescribed mainly to assist treatment-planning rather than for diagnosis and the majority were performed on previously root-filled teeth.

This study compared conventional radiographic and cone beam computed tomography (CBCT) findings with reference to the American Association of Endodontics and American Academy of Oral and Maxillofacial Radiology position statement. CBCT scans of patients, treated at the University of the British Columbia, were reviewed for CBCT referrals by comparing it with corresponding radiographs. The features considered were periapical lesions, missed/extra canals, root fractures, complex anatomy, calcified canals and root resorption. A total of 128 CBCT examinations were performed. Overall, 76% of CBCTs were performed on previously root-filled teeth. CBCT images revealed a significantly higher incidence of periapical lesions, missed canals and vertical root fractures than periapical radiographs. CBCT was prescribed most frequently to assist surgical treatment planning rather than for generating or confirming diagnoses.

<https://doi.org/10.1038/s41415-020-2291-2>