

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.

Taste perception after orthognathic surgery

Malkoc Y, Gulsever S, Uckan S. Change in taste sensation after orthognathic surgery. *Clin Oral Investig* 2024; **28**: 237.

Significant alterations in bitter and sweet taste perceptions after orthognathic surgery.

This study evaluated the effect of orthognathic surgery on taste sensation. Thirty-five patients, scheduled to undergo Le Fort I osteotomy (LFIO), sagittal split ramus osteotomy (SSRO) and bimaxillary surgery (BMS), were evaluated by administering localised and whole-mouth taste tests preoperatively and postoperatively at months 1, 3, and 6. The patients were asked to identify the quality of four basic tastes applied to six locations on the palate and tongue and to rate the taste intensities they perceived. There were significant decreases in the quinine HCl recognition thresholds at the postoperative follow-ups compared to the preoperative in LFIO patients. There were significant decreases in sucrose taste intensity scores in the right posterolateral part of the tongue at months 3 and 6 compared to preoperative in SSRO and significant increases in quinine HCL taste intensity scores in the right and left anterior parts of the tongue at month 6 compared to preoperative in LFIO patients.

<https://doi.org/10.1038/s41415-024-7365-0>

Third molar post-op pain management – alternatives

Falci S G, Fernandes I A, Guimarães M T, Galvão E L, de Souza G M, Al-Moraissi E A. Complementary and alternative therapies for managing postoperative pain after lower third molar surgery: a systematic review and network meta-analysis. *Clin Oral Investig* 2024; **28**: 231.

Alternative and complementary therapies may be useful in reducing postoperative pain.

This study evaluated the impact of complementary and alternative treatments on postoperative pain following lower third molar (LTM) surgeries. A comprehensive search of key electronic databases was carried out and randomised clinical trials investigating the effect of acupuncture, ozone therapy, laser (LLLT), drainage tube, kinesio-taping, ice therapy, and compressions on pain after LTM surgeries were included. Eighty-two papers were included in the qualitative analysis; 33 of them were included in the quantitative analyses. Drainage tubes and kinesio-taping were superior in controlling pain 24 hours postoperatively than no treatment. At 48-hour follow-up, kinesio-taping and LLLT were more effective than placebo and drainage tubes; and kinesio-taping and LLLT were superior to no treatment. At 72 hours postoperatively, ozone therapy was superior to placebo; and drainage tube, kinesio-taping, and LLLT were better than no treatment. At 7-day follow-up, ozone and LLLT were superior to placebo; and LLLT and kinesio-taping were superior to no treatment.

<https://doi.org/10.1038/s41415-024-7367-y>

Dietary patterns and perio

Yue Y, Hovey K M, LaMonte M J, Wactawski-Wende J, Andrews C A, Millen A E. Association between dietary patterns and periodontal disease: the OsteoPerio cohort study. *J Clin Periodontol* 2024; DOI: 10.1111/jcpe.13979.

Better adherence to healthy dietary patterns was associated with better PD measures.

This study examined the association of dietary patterns with periodontal disease (PD). Analyses involved 1,197 post-menopausal women from the OsteoPerio cohort. Dietary patterns assessed included Healthy Eating Index-2015 (HEI), Alternative HEI (AHEI), Dietary Approaches to Stop Hypertension (DASH) and alternate Mediterranean Diet (aMed). At baseline and the five-year follow-up, periodontal assessments evaluated alveolar crestal height (ACH), probing pocket depth (PPD), clinical attachment loss (CAL), percentage of gingival sites bleeding on probing (%BOP) and missing teeth due to PD. Cross-sectionally, HEI and aMed were associated with smaller CAL and %BOP; along with DASH, they were associated with decreased odds of teeth missing due to PD. AHEI and aMed were associated with decreased odds of severe PD. Prospectively, AHEI was associated with greater ACH progression. This association was attenuated to the null after loss of ACH was imputed for teeth lost due to PD over follow-up, or after excluding participants with diabetes, osteoporosis, hypertension or heart disease at baseline.

<https://doi.org/10.1038/s41415-024-7366-z>

Doppler for detection

Bartha V, Grünfeld D, Kopunic A *et al*. Increased safety in periodontal surgery: doppler ultrasound for detection of relevant palatal blood vessels – a proof-of-concept and cross-sectional study. *J Clin Periodontol* 2024; DOI: 10.1111/jcpe.13972.

The Doppler ultrasound transducer might be a promising approach to detect relevant palatine blood vessels preoperatively.

This study evaluated the suitability of a Doppler ultrasound probe in detecting the greater palatine artery non-invasively. The palatal mucosa of 108 participants was systematically divided into transversal sectors, each aligning with the positions of the upper molars (M), premolars (P) and canine teeth (C), aiming to facilitate precise and consistent localisation of the detected palatal blood vessel across different patients. Blood flow of the palatal blood vessels was located by scanning the palatal vault bilaterally using an 8-MHz ultrasound probe linked to a transducer. The distance to the corresponding tooth was measured using a periodontal probe. Within the regions of M2 to P1, the ultrasound transducer gave a delimitable acoustic pulse signal in 80–98% of all measurements. The measured median distances between the determined position of the artery and the corresponding teeth ranged from 13–15 mm.

<https://doi.org/10.1038/s41415-024-7368-x>