RESEARCH INSIGHTS

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**.

The Dahl Concept – what's the evidence?

Goldstein G, Campbell S. The Dahl Concept: Best Evidence Consensus Statement. *J Prosthodont* 2021; doi: 10.1111/jopr.13441. Online ahead of print.

While there is low-level evidence from a few case series that demonstrated the ability to achieve enough space in the anterior region for the restoration of lost anterior tooth structure, there is no compelling evidence to support any theories as to how that space was achieved.

The purpose of this Best Evidence Consensus Statement was to evaluate the existing dental literature related to the Dahl Concept. A PubMed search was limited to clinical studies, clinical trials, randomised controlled trials, systematic reviews, meta-analyses and journal articles. The 20 articles that met the initial search criteria were evaluated and rated. The literature largely focused on the restorative materials that are commonly used to apply the Dahl technique. While there is low-level evidence from a few case series that demonstrated the ability to achieve enough space in the anterior region for the restoration of lost anterior tooth structure, there is no compelling evidence to support any theories as to how that space was achieved. In addition, there is no evidence to support the long-term stability of that position and the restorations.

https://doi.org/10.1038/s41415-021-3787-0

Soft tissue grafting at implant sites

Stefanini M, Tavelli L, Barootchi S, Sangiorgi M, Zucchelli G. Patient-reported outcome measures following soft-tissue grafting at implant sites: A systematic review. *Clin Oral Implants Res* 2021; **32 Suppl 21:** 157–173.

Soft tissue grafting around implants can enhance patient satisfaction and aesthetic evaluation compared to non-grafted sites.

This systematic review considered the available literature on patient-reported outcome measures (PROMs) following soft tissue augmentation at implant sites. A comprehensive electronic and manual search was performed to identify clinical studies that involved soft tissue augmentation around dental implants and reported PROMs, including post-operative morbidity, painkillers intake, quality of life, aesthetics and satisfactions. Nineteen articles were included in the qualitative analysis. Autogenous grafts (free gingival graft and connective tissue graft), acellular dermal matrix and xenogeneic collagen matrix were utilised, either with a bilaminar or an apically positioned flap approach. PROMs represent a crucial endpoint of clinical studies evaluating the outcomes of soft tissue grafts at implant sites. Most of the studies did not find significant differences in terms of patient morbidity and painkillers between autogenous grafts and substitutes. Soft tissue grafting can enhance patient satisfaction and aesthetic evaluation compared to non-grafted sites.

https://doi.org/10.1038/s41415-021-3788-z

Persistent idiopathic dentoalveolar pain

Sanner F, Sonntag D, Hambrock N, Zehnder M. Patients with persistent idiopathic dentoalveolar pain in dental practice. *Int Endod J* 2021; doi: 10.1111/ iej.13664. Online ahead of print.

PIDAP mainly affected female patients and was associated with undisturbed sleep as well as periodontal allodynia.

This observational study assessed whether persistent idiopathic dentoalveolar pain (PIDAP), a diagnosis of exclusion, exhibits common features that can facilitate its diagnosis. Participants fulfilling the new International Classification of Orofacial Pain diagnostic criteria of PIDAP were included. Among the 160 patients assessed, 78 (63 women) fulfilled the strict PIDAP criteria. Pain history of PIDAP included no nocturnal awakening (85%) and a 'pulling/dragging' pain quality (59%). In 69% of the patients with PIDAP, pain was associated with a root-filled tooth at the same site. In 14% of the cases, no endodontic treatment was performed in the affected quadrant. Mechanical allodynia in the gingival sulcus was observed in 90% of patients with painful teeth or implants.

https://doi.org/10.1038/s41415-021-3788-z

Analgesia in acute post-operative pain

Lyngstad G, Skjelbred P, Swanson D M, Skoglund L A. Analgesic effect of oral ibuprofen 400, 600, and 800 mg; paracetamol 500 and 1000 mg; and paracetamol 1000 mg plus 60 mg codeine in acute postoperative pain: a single-dose, randomized, placebo-controlled, and double-blind study. *Eur J Clin Pharmacol* 2021; **77**: 1843–1852.

Paracetamol 1,000/codeine 60 mg gave similar analgesia as ibuprofen from 400 mg.

Ibuprofen (400 mg, 600 mg, 800 mg), paracetamol (1,000 mg, 500 mg), paracetamol 1,000 mg/codeine 60 mg, and placebo were investigated to establish the multidimensional pharmacodynamic profiles. A randomised, double-blind, placebo-controlled study used 350 patients after third molar surgery. Primary outcome was sum pain intensity over six hours. Secondary outcomes were time to analgesic onset, duration of analgesia, time to rescue drug intake, number of patients taking rescue drug, sum pain intensity difference, maximum pain intensity difference, time to maximum pain intensity difference, number needed to treat, adverse effects, overall drug assessment as patient-reported outcome measure (PROM), and the effect size estimates NNT and NNTp. Ibuprofen doses above 400 mg do not significantly increase analgesic effect. Paracetamol has a very flat analgesic dose-response profile. Paracetamol 1,000/codeine 60 mg gave similar analgesia as ibuprofen from 400 mg but had a shorter time to analgesic onset. Active drugs show no significant difference in maximal analgesic effect. The frequencies of adverse effects were low, mild to moderate in all active groups. NNT and NTTp values did not coincide well with PROMs. https://doi.org/10.1038/s41415-021-3790-5