

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.

Treatment guidelines for stage I–III periodontitis

West N, Chapple I, Claydon N *et al.* BSP implementation of European S3-level evidence-based treatment guidelines for stage I–III periodontitis in UK clinical practice. *J Dent* 2021; DOI: 10.1016/j.jdent.2020.103562. Online ahead of print.

This guideline delivers evidence- and consensus-based clinical recommendations relevant to the UK dental community.

These guidelines aimed to adapt the supranational European Federation for Periodontology (EFP) S3-Level Clinical Practice Guidelines for the treatment of periodontitis (stage I–III) to a UK healthcare environment, taking into account the views of a broad range of stakeholders, and patients. The source guideline was developed using the S3-level methodology, which combined the assessment of evidence from 15 systematic reviews. It encompasses 62 clinical recommendations for the treatment of stage I–III periodontitis, based on a step-wise process mapped to the 2017 classification system. The UK version was developed from the source guideline using a formal process called the GRADE ADOLPMENT framework. This allows for the adoption (unmodified acceptance), adaptation (acceptance with modifications) and the *de novo* development. The systematic reviews were updated and a representative guideline group of 75 delegates from 17 stakeholder organisations was assembled into three working groups. Following the formal S3-process, all clinical recommendations were formally assessed for their applicability to the UK and adopted accordingly. Four steps are outlined with key changes to terminology including the use of the phrase professional mechanical plaque removal (PMPR).

<https://doi.org/10.1038/s41415-021-2846-x>

Cowden syndrome

Sabir A, Parry G, Heaton T, Ong K R. Cowden syndrome: new clinical features in a large family; joint hyperextensibility, dental abnormalities and gingival enlargement. *BMJ Case Rep* 2021; 14: DOI: 10.1136/bcr-2020-236768.

Novel features of Cowden syndrome include gingival enlargement and dental abnormalities.

A four-year-old boy presented with his mother to genetics in the 1980s, with a family history (FH) of macrocephaly and intellectual disability (ID). He remained undiagnosed until his mother developed multiple cancers and was diagnosed with Cowden syndrome (CS) in 2017, a rare, multisystem cancer predisposition syndrome. CS was then confirmed in multiple family members. Clinical examination revealed potentially novel features; gingival enlargement, dental abnormalities and joint hyperextensibility. These features could contribute to revised *PTEN* hamartoma tumour syndrome, National Comprehensive Cancer Network, minor diagnostic criteria. The paediatric CS phenotype is still emerging, and features expressed in this family during childhood could potentially aid paediatric diagnosis.

<https://doi.org/10.1038/s41415-021-2852-z>

Socket shield technique

Ogawa T, Sitalaksmi R M, Miyashita M *et al.* Effectiveness of the socket shield technique in dental implant: a systematic review. *J Prosthodont Res* 2021; DOI: 10.2186/jpr.JPR_D_20_00054. Online ahead of print.

The socket shield technique can be used in dental implant treatment, but it remains difficult to predict the long-term success of this technique until high-quality evidence becomes available.

The socket shield technique may be an alternative for a desirable aesthetic outcome in dental implant treatments. A search was completed for clinical studies published from December 2019 to January 2000. Twenty studies were included, comprising one randomised controlled trial, two cohort studies, 14 clinical human case reports, and three retrospective case series. In total, 288 patients treated with the socket shield technique with immediate implant placement and follow-up between 3–60 months after placement were included. A quality assessment showed that 12 of the 20 included studies were of good quality. Twenty-six of the 274 (10%) cases developed complications or adverse effects related to the socket shield technique. Most studies reported implant survival without the complications (91%); most of the cases that were followed up for more than 12 months after implant placement achieved a good aesthetic appearance. The failure rate was low without the complications, although there were some failures due to failed implant osseointegration, socket shield mobility and infection, socket shield exposure, socket shield migration, and apical root resorption.

<https://doi.org/10.1038/s41415-021-2851-0>

Periodontitis treatment outcomes and peri-implantitis

Vagia P, Papalou I, Burgy A, Tenenbaum H, Huck O, Davideau J.-L. Association between periodontitis treatment outcomes and peri-implantitis: a long-term retrospective cohort study. *Clin Oral Implants Res* 2021; DOI: 10.1111/clr.13741. Online ahead of print.

The severity of the periodontal status appeared to be a reliable indicator of patient susceptibility to peri-implantitis.

This retrospective study evaluated the association of periodontal treatment outcomes and the prevalence of peri-implant diseases around tissue-level implants. Eighty-six patients with 260 tissue-level Straumann implants attending supporting periodontal and implant therapy for more than three years were evaluated. Clinical and radiographic periodontal and implant data were recorded at initial examination, before implant placement and at final re-examination. The mean implant follow-up per patient was 9.4 years and 38% of patients had implants for at least ten years. Two implants were lost due to peri-implantitis. Initial diagnosis of severe periodontitis was associated to peri-implantitis incidence. Periodontal conditions before implant placement are a risk indicator for peri-implantitis incidence.

<https://doi.org/10.1038/s41415-021-2853-y>