A summary of: Treatment of stage I–III periodontitis—The EFP S3 level clinical practice guideline

Original publication: Sanz M, Herrera D, Kebschull M, et al. Treatment of stage I-III periodontitis-The EFP S3 level clinical practice guideline. *J Clin Periodontol*. 2020;47 Suppl 22:4-60.

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The European Federation of Periodontology recently released clinical practice guidelines for the treatment of Stage I-III periodontitis. The prevalence of periodontitis is very high, and it is the responsibility of the dental professional to both prevent and properly treat periodontal diseases using an evidence-based, patient-centred approach. The recently published document provides an easy-to-follow evidence-based guide for treatment recommendations. Commonly asked questions and controversies are presented with answers based on the best available evidence (See appendix).

The first step in the treatment of periodontitis is to initiate behavioural changes in order to facilitate proper oral hygiene practices. Periodontal disease is associated with bacterial plaque biofilm and therefore, biofilm removal is crucial for the prevention and treatment of periodontitis. Important notes from these evidence-based guidelines include customized oral hygiene instructions that are continually repeated at each appointment as well as the use of interdental brushes or wooden toothpicks over floss for interproximal cleaning when anatomically possible. Flossing is not suggested as the first choice for interdental cleaning in periodontal maintenance patients. Furthermore, the first step also includes professional mechanical plaque removal including professional scaling and toothbrushing as well as risk factor mitigation.

The second step of treatment involves subgingival instrumentation as well as adjunctive therapies that should only be used for teeth that have lost periodontal support or have pocket formation. It is important to note that several adjunctive therapies are marketed in the dental field (lasers, statin gels, photodynamic therapy etc.), however, they do not necessarily have evidence to justify their use in the clinic setting. Furthermore, treatment outcomes are not dependant on whether hand scaling or ultrasonic scaling is used based on the available evidence.

The third step comes into practice when pockets over 4mm with BOP or pockets 6mm and greater remain. Residual pockets of 4-5mm are recommended to be treated with additional subgingival instrumentation while pockets 6mm or greater may benefit from periodontal surgery. However, surgery is not recommended if the patient cannot maintain adequate oral hygiene. As detailed in the new classification of periodontal disease, gingival health (which is reflective of good oral hygiene) is defined as less than 10% of bleeding sites in the overall periodontal chart.

When a patient enters the supportive periodontal care phase of the treatment, these guidelines highlight the importance of customizing a recall system specific to each individual patient which includes repeated oral hygiene instructions and ongoing evaluation. Compliance with supportive periodontal therapy is key to long term success. Overall, these clinical practice guidelines developed by the European Federation of Periodontology allow dental professionals to treat Stages I-III periodontitis with an evidence-based, patient-centred approach and should be used to inform clinical decision making.

It is highly recommended to read the full text of the original publication as it contains exceptionally valuable information.

Appendix: *Selected clinically relevant questions and the evidence based answered as presented in the original paper (Sanz M, Herrera D, Kebschull M, et al. Treatment of stage I-III periodontitis-The EFP S3 level clinical practice guideline. J Clin Periodontol. 2020;47 Suppl 22:4-60.):*

Q1: What is the efficacy of dietary counselling in periodontitis therapy? ***We do not know whether dietary counselling may have a positive impact in periodontitis therapy.***

Q2: Are oral hygiene instructions important? How should they be performed? ***Repeated, individually tailored instructions in mechanical oral hygiene, including interdental cleaning is highly important, in order to control inflammation and avoid potential damage for periodontal patients.***

Q3: How should interdental cleaning be performed? ***If anatomically possible, we recommend that tooth brushing should be supplemented by the use of interdental brushes.***

Q4: What is the value of dental flossing for interdental cleaning in periodontal maintenance patients? ***We do not suggest flossing as the first choice for interdental cleaning in periodontal patients.***

Q5: What are the adequate oral hygiene practices of periodontitis patients in the different steps of periodontitis therapy? ***The same guidance on oral hygiene practices to control gingival inflammation is enforced throughout all the steps of periodontal therapy including supportive periodontal care.***

Q6: What is the importance of adequate self performed oral hygiene in the context of surgical periodontal treatment? ***We recommend not to perform periodontal (including implant) surgery in patients not achieving and maintaining adequate levels of self-performed oral hygiene.***

Q7: Should alternative methods be used for professional mechanical plaque removal (PMPR) in supportive periodontal care? ***We suggest not to replace conventional professional mechanical plaque removal (PMPR) with the use of alternative methods (Er:YAG laser treatment) in supportive periodontal care.***

Q8: Are treatment outcomes of subgingival instrumentation better after use of hand, powered instruments or a combination thereof? ***We recommend that subgingival periodontal instrumentation is performed with hand or powered (sonic/ultrasonic) instruments, either alone or in combination.***

Q9: Are treatment outcomes with adjunctive application of laser superior to non-surgical subgingival instrumentation alone? ***We suggest not to use lasers as adjuncts to subgingival instrumentation.***

Q10: Does the adjunctive use of adjunctive chemotherapeutics (antiseptics) improve the clinical outcome of subgingival instrumentation? ***Adjunctive antiseptics may be considered, specifically chlorhexidine mouth rinses for a limited period of time, in periodontitis therapy, as adjuncts to mechanical debridement, in specific cases.***

Q11: What is the value of adjunctive antiseptics/ chemotherapeutic agents for the management of gingival inflammation? ***The basis of the management of gingival inflammation is self-performed mechanical removal of biofilm. Adjunctive measures, including antiseptic, may be considered in specific cases, as part of a personalized treatment approach.***

Q12: How effective are access flaps as compared to repeated subgingival instrumentation? ***In the presence of deep residual pockets (PPD ≥ 6 mm) in patients with Stage III periodontitis after the first and second steps of periodontal therapy, we suggest performing access flap surgery. In the presence of moderately deep residual pockets (4–5 mm), we suggest repeating subgingival instrumentation.***

Q13: What is the adequate management of molars with Class II and III furcation involvement and residual pockets? ***We recommend that molars with Class II and III furcation involvement and residual pockets receive periodontal therapy. Furcation involvement is no reason for extraction.***

Q14: Is adherence to supportive periodontal care important? ***We recommend that adherence to supportive periodontal care should be strongly promoted, since it is crucial for long-term periodontal stability and potential further improvements in periodontal status.***