

The American Academy of Periodontology Statement Regarding Gingival Curettage*

Gingival curettage is a surgical procedure designed to remove the soft tissue lining of the periodontal pocket with a curet, leaving only a gingival connective tissue lining. Gingival curettage is a distinct procedure that may be performed in conjunction with, or subsequent to, scaling and root planing (SRP). The SRP procedure is aimed at the complete removal of bacteria, biofilm, calculus, and diseased root structure to achieve a biologically acceptable root surface. These two procedures are often performed simultaneously, which makes it difficult to determine their separate effects.

Gingival curettage, as originally conceived, was designed to promote new connective tissue attachment to the tooth, by the removal of pocket lining and junctional epithelium.^{1,2} The actual result obtained with curettage is most often a long junctional epithelium, which is the same result obtained with SRP alone.³ The theoretical clinical advantage of curettage over SRP alone was eliminated when new connective tissue attachment was shown to be an unattainable goal.³ Gingival curettage, although surgical in nature, is a closed procedure. It does not afford the improved root surface access and visibility gained with flap surgery that is needed to achieve complete mechanical removal of plaque, calculus, and biofilm.

Short- and long-term clinical trials have confirmed that gingival curettage provides no additional benefit when compared to SRP alone in terms of probing depth reduction, attachment gain, or inflammation reduction.⁴⁻⁷ After comparing SRP alone to curettage plus SRP, it was concluded that curettage “did not serve any additional useful purpose.”⁶ Following an extensive review of the topic in the 1989 World Workshop in Clinical Periodontics, it was concluded that curettage had “no justifiable application during active therapy for chronic adult periodontitis.”⁸ These studies provide convincing evidence that SRP alone produces results that are clinically equivalent to curettage plus SRP. When these findings are considered, it must be concluded that curettage is a procedure which provides historic interest in the evolution of periodontal therapy but has no current clinical relevance in the treatment of chronic periodontitis.

While gingival curettage is defined as being performed with a curet, a review of the literature reveals that other methods have been reported. Sodium sulfide, phenol camphor, antiformin, and sodium hypochlorite have been used for chemical curettage.⁹⁻¹⁵ Curettage with ultrasonic devices also has been described.¹⁶⁻¹⁸ All of these methods have the same goal, which is complete removal of epithelium. There are no reports showing that these alternative methods of epithelial removal have any clinical or microbial advantage over mechanical instrumentation with a curet.¹⁹ Based on current studies, gingival curettage, by whatever method performed, should be considered as a procedure that has no additional benefit to SRP alone in the treatment of chronic periodontitis.

Recently, a method of curettage with a dental laser has been proposed. The goals of laser curettage are epithelial removal, as with previous methods, and, in addition, bacterial reduction. A short-term study reported that Nd:YAG laser treatment did not produce statistically significant bacterial reduction.²⁰ This was subsequently confirmed in a multicenter study of laser curettage, which reported that bacterial reduction was not often achieved.^{21,22} Only 1 of the 3 centers reported an advantage in bacterial reduction over SRP alone.²² One pilot and follow-up study did report bacterial reduction with a diode laser; however, the laser treatment was repeated, while the SRP was not.^{23,24} These findings indicate that despite advances in technology, gingival curettage, as a clinical procedure, fails to consistently provide any advantage over SRP alone for the treatment of chronic periodontitis.

Since there is no evidence that gingival curettage has any therapeutic benefit in the treatment of chronic periodontitis, the American Dental Association has deleted that code from the fourth edition of *Current Dental Terminology (CDT-4)*. In addition, the American Academy of Periodontology, in its *Guidelines for Periodontal Therapy*, did not include gingival curettage as a method of treatment. This indicates that the dental community as a whole regards gingival curettage as a procedure with no clinical value.

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