

Delta Dental of Virginia Clinical Policy # 407
Subject

Scaling and Root Planing

Originating Department

Clinical Professional Services

Signature Authority

Dental Director

Type: New Replacement Revision Clarification

Date: 11/15/2009 **Revision Date:**
Preamble:

The Clinical Policy Bulletin is an expression of Delta Dental of Virginia's (DDVA) determination regarding whether certain services or supplies are medically or dentally necessary. DDVA bases its conclusions on a review of currently available clinical literature. This includes, but is not limited to, clinical outcome studies published in the peer-reviewed medical and dental literature, regulatory status of the technology, evidence-based guidelines of public health and health research agencies, evidence-based guidelines and positions of leading national health professional organizations, views of physicians and dentists practicing in pertinent clinical areas, and other applicable information. DDVA reserves the right to revise these policies as new clinical information is available and we welcome submission of further relevant information.

Each group defines covered dental services under their dental plan, as well as those services that may be subject to dollar caps or other limits. The plan documents outline covered benefits, exclusions and limitations. DDVA advises dentists and subscribers to consult the plan documents to determine if there are exclusions or other benefit limitations applicable to the service request. The conclusion that a particular service is medically or dentally necessary does not constitute an indication or warranty that the service requested is a covered benefit payable by DDVA. Some plans exclude coverage for services that DDVA considers either medically or dentally necessary. When there is a discrepancy between DDVA's clinical policy and the group's plan documents, DDVA is to defer to the group's plan documents as to whether the dental service is a covered benefit. In addition, if state or federal regulations mandate coverage then DDVA will adhere to the applicable regulatory requirement.

History:

Periodontal scaling and root planing is a technically demanding and time-consuming procedure involving instrumentation of the tooth crown and root structures. The instrumentation attempts to remove plaque, adherent calculus deposits, and cementum (root tooth structure) that may be permeated with calculus, microorganisms and microbial toxins. The periodontal scaling and root planing procedure is considered therapeutic, rather than prophylactic, and constitutes definitive treatment for periodontal patients. The therapeutic objective of scaling and root planing is to reduce or eliminate causative factors responsible for initiating a host inflammatory response (1).

The beneficial effects of scaling and root planing include improvement with the clinical parameters of periodontal disease such as inflammation, bleeding, and loss of the periodontal attachment (2,3,4,5,6,7), shifts of subgingival microorganisms (bacteria) to populations considered less pathogenic (harmful) to periodontal tissues (8,9), and a possible improved host immune response to the selected bacterial species (21). Some soft tissue removal is commensurate with the treatment process, but studies show no additional beneficial effect of an additional

	<p>procedure such as gingival curettage when compared to scaling and root planing alone (10,11). Limitations of the effectiveness of scaling and root planing include the presence of furcation involvements (exposure of the space between the roots of molar teeth) (14,15), variations in root morphology (16,17), and areas of deep pocket depth (1,18,19,20).</p> <p>The positive clinical response of patients to this treatment, in conjunction with supportive therapy, often precludes the need for surgical intervention. Long-term studies show that periodontal scaling and root planing, when combined with a program of continued periodontal maintenance, can stabilize the periodontal disease process for many patients over long periods of time (22,23,24,25,26,27,28). Research shows that following scaling and root planing, clinical improvements begin to maximize at about three months post-therapy (3,4,5,6,12,13). Consequently, evaluations for the necessity of later surgical procedures must allow time for an appropriate healing response to determine need.</p>
Policy:	DDVA Guidelines: <ol style="list-style-type: none"> 1. Documentation of the need for this procedure must include a current periodontal charting. 2. Teeth to be treated must have at least 4mm probing pocket depths.
Code(s):	4341 – Four or more diseased teeth per quadrant 4342 – Less than three diseased teeth per quadrant
References:	<ol style="list-style-type: none"> 1. American Academy of Periodontology. Treatment of Gingivitis and Periodontitis (position paper). J Perio;1997;12:1246-1253. 2. Morrison EC, Ramfjord SP and Hill RW. Short-Term Effects of Initial Non-Surgical Periodontal Treatment (Hygienic Phase). J Clin Perio 1980;7:199-211. 3. Garrett JS. Effects of Non-Surgical Periodontal Therapy on Periodontitis in Humans. A Review. J Clin Perio 1983;10:515-523. 4. Badersten A, Nilveus R and Egelberg J. Effect of Non-Surgical Periodontal Therapy. I. Moderately Advanced Periodontitis. J Clin Perio1981;8:57-72. 5. Badersten A, Nilveus R and Egelberg J. Effect of Non-Surgical Periodontal Therapy. II. Severly Advanced Periodontitis. J Clin Perio 1984;11:63-76. 6. Hughes TP and Caffesse RG. Gingival Changes Following Scaling and Root Planing and Oral Hygiene—A Biometric Evaluation. J Perio 1978;49:245-252. 7. Kaldahl WB, Kalkwarf KL, et al. Long-Term Evaluation of Periodontal Therapy: I. Response to Four Therapeutic Modalities. J Perio 1996;67:93-102. 8. Magnusson I, Lindhe J, et al. Recolonization of Subgingival Microbiota Following Scaling in Deep Pockets. J Clin Perio 1984;11:193-207. 9. Mosques T, listgarten MA and Phillips RW. Effect of Scaling and Root Planing on the Composition of Human Subgingival Microbial Flora. J Perio Res 1980; 15:144-151. 10. Ainslie P and Caffesse R. A Biometric Evaluation of Gingival Curettage (II). Quintessence Int'l 1981;6:609-614. 11. Escheverra JJ and Caffesse RG. Effects of Gingival Curettage When Performed One Month After Maintenance Instrumentation. A Biometric Evaluation. J Clin Perio 1983;10:277-286. 12. Nordland P, Garrett S, et al. The Effect of Plaque Control and Root Debridement in Molar Teeth. J Clin Perio 1987;14:231-236. 13. Loos B, Kiger R and Egelberg J. An Evaluation of Basic Periodontal Therapy Using Sonic and Ultrasonic Scalers. J Clin Perio 1987;14:29-33. 14. Fleischer HC, Mellonig JT, et al. Scaling and Root Planing Efficiency in

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