DELTA DENTAL

Delta Dental of Virginia Clinical Policy # 001	
Subject Collection of Microorganisms for Culture and Sensitivity	**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. A group may define 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:	It has been proposed that identification and suppression of specific periodontally pathogenic organisms in individuals affected by progressive, refractory periodontal disease would be a useful adjunct in the treatment of these particular patients (1, 2). Research has shown that the use of systemic antibiotics may be helpful in the treatment of progressive periodontitis (3,4,5,6) and, specifically, the use of systemic antibiotics in conjunction with definitive periodontal therapy has been shown to offer slight improvements in clinical attachment levels when compared to patients treated without adjunctive antibiotic therapy (3,4,5). However, due to the possible sequelae of the administration of systemic antibiotics, periodontal disease should generally be treated without the use of these adjunctive drugs (3,4,7). Common adverse consequences of antibiotic administration include medication intolerance, hypersensitivity and anaphylactic reactions, gastrointestinal disorders, and the increasing problem of the development of resistant bacteriologic organisms (4,5). Systemic antibiotic therapy is considered useful primarily for patients with early onset and refractory or aggressive disease processes that do not respond to conventional conservative or conventional mechanical therapy (8). There is insufficient evidence in the literature to support the use of microbial identification in treating patients for chronic periodontal disease states (5).

	Systematic reviews of the literature reveal the following: adjunctive antibiotics may enhance clinical attachment for up to six months for patients with aggressive periodontitis; the use of antibiotics demonstrates better relative results at disease sites with 6mm or greater pocket depths; and the antibiotics that demonstrated statistically significant improvement in pocket depth included, tetracycline/doxycycline, metronidazole, and combinations of metronidazole and amoxicillin (1). However, although some studies have indicated slight improvement for periodontal therapy, the consensus opinion is that there is inconclusive evidence to determine which antibiotic regimen are the most effective, which are the most efficacious dosages and efficacious therapy duration, and the length of useful outcomes following administration.
Policy:	DDVA guidelines: 1. Bacteriologic studies for determination of pathologic agents are generally denied as this procedure is considered a specialized or elective procedure. Benefits are dependent on individual contract coverage. 2. Patients must have a history of previous definitive periodontal therapy. 3. Documentation of the progressive nature of the patient's disease process and the rationale for treatment must be provided by a narrative report. 4. Documentation for the necessity of this procedure must also include sequential periodontal charting. 5. A copy of the laboratory report must be provided.
Code(s):	D0415 – Collection of microorganisms for culture and sensitivity.
References:	1. Caton J. Periodontal diagnosis and diagnostic aids. American Academy of Periodontology. Proceedings of the World Workshop in Clinical Periodontics 1989;Sec I:I-22. 2. Zambon JJ. The adjunctive use of clinical microbiology in periodontal diagnosis and treatment. American Academy of Periodontology. Periodontal Disease management: A Conference for the Dental Team 1993;115-125. 3. Haffajee AD, Socransky SS and Gunsolley JC. Systemic anti-infective therapy. A systematic review. American Academy of Periodontology. Annals Periodontol 2003;8:115-181. 4. Lindhe J, Karring K and Lang NP. Clinical Periodontology and Implant Dentistry. 3rd Ed. 2000. Munksgaard. Copenhagen. 5. Harrera D, Sanz M, et al. A systematic review on the effect of systemic antimicrobials as an adjunct to scaling and root planing in periodontitis patients. J Clin Periodontol;2002;29(Suppl 3):136-159. 6. Greenstein G. Changing periodontal concepts: Treatment considerations. Compend Cont Educ Dent 2005;26:81-97. 7. American Academy of Periodontology. Translating findings of systemic reviews into consensus statements on periodontal therapy. J Amer Dent Assoc 2004; 135:1099-1107. 8. American Academy of Periodontology. Position paper. Systemic Antibiotics in Periodontics. J Perio 2004; 75:1553-1565. 9. American Dental Association. Current Dental Terminology. CDT 2009-2010. © 2008 Amer Dent Assoc.