

'Delta Dental of Virginia Clinical Policy # 402

Subject Mucogingival Surgery and Soft Tissue Grafting	Originating Department Clinical Professional Services
	Signature Authority Dental Director

Type: New Replacement Revision Clarification

Date: 11/09/2009 **Revision Date:** 11/15/2011

Preamble:	<p>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 relevant clinical areas, and other relevant factors. DDVA reserves the right to revise these policies as new clinical information is available and we welcome submission of further relevant information.</p> <p>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 enrollees 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.</p>
History:	<p>The term Mucogingival Surgery was proposed by Friedman in 1957 to indicate any surgery designed to preserve and maintain attached gingiva, to remove the muscle attachment, and to increase the depth of the oral vestibule. Abnormal mucogingival conditions include deviations from the normal anatomic relationship between the attachment of the gingival margin and the cemento-enamel junction of the affected tooth, or of the gingival margin and the mucogingival junction. Factors predisposing mucogingival problems include tooth malposition, underlying alveolar bone dehiscences, thin marginal soft tissue, trauma, frenum (muscle) attachments, iatrogenic influences of restorative, orthodontic or periodontal treatment and localized inflammatory problems secondary to plaque accumulation, viral eruption and recurrent aphthous ulceration.</p> <p>Mucogingival conditions that may require corrective surgery include progressive gingival recession or loss with concomitant root exposure, absence or reduced amounts of keratinized attached gingiva, periodontal pocket depth probing extending beyond the mucogingival junction, high active frenum attachments and inadequate vestibular depth. Other clinical conditions which may influence the need for treatment include chronic marginal inflammation and root sensitivity.</p>

It should be noted that many studies showing root exposure associated with gingival recession may not be a progressive pathologic process and the decision for surgical intervention cannot be made solely on the basis of the presence or absence of “adequate” or “inadequate” amounts of keratinized attached gingiva. Further, it is well documented that in the presence of good oral hygiene and routine prophylactic maintenance most areas of recession remain stable over long periods of time(1,2,3,4,5,6,7,8,9).

The therapeutic goal of surgical treatment is the re-establishment as nearly as possible of the normal tooth to mucogingival relationship. Specific goals of surgery include reestablishment of an increased zone of attached gingiva, elimination of high active frenum or muscle attachment, root coverage, and where indicated, extension of oral vestibular depth. Surgical procedures include pedicle soft tissue grafts, free gingival grafts, subepithelial connective tissue grafts and soft tissue allografts.

Risk factors for unsuccessful treatment of mucogingival defects include:

1. Smoking(1,2,3)
2. Use of smokeless tobacco (10)
3. Poor oral hygiene
4. Unacceptable anatomic features such as shallow vestibular height associated with the zygomatic arch or the buccal shelf

Evaluation of abnormal mucogingival conditions should include:

1. A medical history to identify systemic problems or medications that may affect treatment
2. A dental history and oral examination which may identify local, factual or iatrogenic factors affecting treatment

The American Academy of Periodontology recommends evaluation of the following factors prior to treatment of mucogingival defects(13):

1. Gingival recession of 2mm or more with inadequate keratinized tissue. Inadequate keratinized tissue is defined as <2mm in width of which less than 1mm is attached gingival
2. Less than 1mm of attached gingival
3. Root abrasion
4. Class V caries or defective restorations
5. Aberrant frenum attachments
6. Inability to maintain the marginal tissue in periodontal health (minimal probing depth with no bleeding or inflammation)
7. Planned, current or completed orthodontic treatment
8. Need for restorative care of the tooth

	<ul style="list-style-type: none"> 9. Progression of recession 10. Root sensitivity 11. Age of the patient 12. Presence of periodontitis 13. Abnormal tooth position relative to the alveolar ridge
Policy:	<p>DDVA Guidelines:</p> <ul style="list-style-type: none"> 1. The following must be specifically documented prior to mucogingival surgery: <ul style="list-style-type: none"> 1. Measurements of recession in mm's (CEJ to gingival margin) 2. Measurements of attached gingiva in mm's 3. Periodontal pocket depth probing measurements in mm's 4. Notation on the presence of high active frenum attachments 5. Number of teeth affected 6. History of progressive recession within 12 months prior to treatment 7. Photographic documentation, if possible, of areas demonstrating recession 2. In the absence of extraordinary circumstances, such as frenum involvement, chronic inflammation, etc., mucogingival surgery for correction of recession defects will only be considered if the periodontal charting indicates minimal recession to two millimeters. 3. Mucogingival surgical procedures include all evaluation and post-operative care for three months and any surgical re-entry for three years. 4. Mucogingival surgery will be considered for treatment of periodontal defects on natural teeth only.
Codes(14):	<p>D4270 – Pedicle soft tissue graft procedure D4271 – Free soft tissue graft procedure (including donor site surgery) D4273 – Subepithelial connective tissue graft procedures, per tooth D4275 – Soft tissue allograft D4276 – Combined connective tissue and double pedicle graft, per tooth</p>
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