



Clinical Guideline

Subject: Osseous Surgery

Guideline #: 04-205

Status: New

Current Effective Date: 03/24/2017

Last Review Date: 07/10/2017

Description

This document addresses the procedure of osseous surgery used in the treatment of periodontal disease when there is resultant bone loss.

Note: Please refer to the following documents for additional information concerning related topics:

- Bone grafts for Dental Surgical Services (07-901)
- Anthem Scaling and Root Planing (04-301)
- Mucogingival Surgery and Soft Tissue Grafting (04-204)

Clinical Indications

Medically Necessary: When gingivitis progresses to periodontal disease, osseous surgery may be necessary. To be medically necessary, bone loss (horizontal or vertical defects) must be noted around teeth and dental implants. An associated history of pocket depth recordings must be equal to or greater than 5mm with spontaneous bleeding or bleeding upon probing must also be demonstrated.

Medically/Dentally Necessary or Medical/Dental Necessity means Medical/Dental Services that are:

(1) Consistent with the Member's diagnosis or condition;

(2) Is rendered:

- (A) In response to a life-threatening condition or pain; or
- (B) To treat an injury, illness or infection related to the dentition; or
- (C) To achieve a level of function to the dentition consistent with prevailing community standards for the diagnosis or condition.

Not Medically Necessary: Any diagnosis or condition that does not meet the medical necessity criteria as stated under Medically Necessary.

Criteria

Osseous surgery procedures are considered appropriate with:

1. Completion of initial periodontal therapy (e.g. scaling and root planing) allowing a minimum of six weeks prior to any surgical treatment for the tissues to properly heal which allows for proper assessment of the success or failure of non-surgical therapy.
2. Documentation by pocket depth recording post initial therapy demonstrating pocket depths greater than or equal to 5mm.
3. A current (within the most recent 12 months) periodontal pocket probing chart, after completion of non-surgical periodontal therapy, 4341/4342 and/or periodontal maintenance, D4910, is required.
4. Submission of clinical, diagnostic radiographic images demonstrating either horizontal and/or vertical osseous defects with loss of lamina dura.
5. A detailed narrative describing loss of the supporting alveolar bone when radiographic images are not demonstrative.
6. Benefits will be limited to two quadrants per date of service. Exceptions will be allowed on a case by case basis.

Dependent upon group contract, osseous surgery may be appropriate for the treatment of periodontal disease defects on natural teeth and dental implants. Dental implants will be considered the same as a natural tooth as it relates to quadrant surgery.

Osseous surgery includes post-operative management for the immediate three months following surgery as well as for any surgical re-entry for three years (group contract dependent).

Note: Whether a service is covered by the plan, when any service is performed in conjunction with or in preparation for a non-covered or denied service, all related services are also either not covered or denied.

Coding

The following codes for treatments and procedures applicable to this document are included below for informational purposes. Inclusion or exclusion of a procedure, diagnosis or device code(s) does not constitute or imply member coverage or provider reimbursement policy. Please refer to the member's contract benefits in effect at the time of service to determine coverage or non-coverage of these services as it applies to an individual member.

CDT

Including, but not limited to, the following:

D4260	Osseous surgery (including elevation of a full thickness flap and closure) – four or more contiguous teeth or tooth bounded spaces per quadrant
D4261	Osseous surgery (including elevation of a full thickness flap and closure) – one to three contiguous teeth or tooth bounded spaces per quadrant
D6102	Debridement and osseous recontouring of a peri-implant defect or defects surrounding a single implant, and includes surface cleaning of the exposed implant surfaces, including flap entry and closure

CPT

Including, but not limited to, the following:

41830	Alveolectomy, including curettage of osteitis or sequestrectomy
41874	Alveoloplasty, each quadrant (specify)
41899	Unlisted procedure, dentoalveolar structures

ICD-10 Diagnosis

Including, but not limited to, the following:

K05.0	Acute gingivitis
K05.1	Chronic gingivitis
K05.2	Aggressive periodontitis
K05.3	Chronic periodontitis
K05.4	Periodontosis
K05.5	Other periodontal diseases
K05.6	Periodontal disease, unspecified
K08.40 (K08.401K08.404)	Partial loss of teeth, unspecified cause

K08.42 (K08.421K08.429) Partial loss of teeth due to periodontal disease

Discussion/General Information

Periodontal disease is an inflammatory disease that affects the soft and hard structures that support the teeth. Gingivitis is the early stage of periodontal (bone) disease where the gingiva become swollen and red due to inflammation, the body's natural response to the presence of harmful bacteria. The first line of treatment for periodontal disease is quadrant or partial quadrant scaling and root planing with the goal to remove the biofilm around the teeth that includes plaque and calculus accumulation. A quadrant is defined as one of the four equal sections into which the dental arches can be divided (upper right and left and lower right and left).

This treatment may or may not halt the progression of periodontal disease which demonstrates loss of the supporting bone around teeth creating horizontal and vertical defects and red, swollen gingiva that bleed upon probing or demonstrate spontaneous bleeding. Diagnosis of active disease usually demonstrates loss of the lamina dura. The lamina dura is the surface bone that surrounds the tooth socket providing the attachment surface for the Sharpey's fibers of the periodontal ligament to perforate and stabilize the tooth within the socket. When scaling and root planing of the teeth cannot halt progression of the disease it becomes necessary to address the bone defects and loss of attachment surgically. This procedure is defined as osseous surgery.

Osseous surgery is the minor surgical treatment of the dentoalveolar structures that support the teeth. This procedure allows access to the bone defects of the alveolar process associated with the tooth roots by creating a full mucoperiosteal flap separating the underlying soft tissue structures from the bone of the dental arches. The bony support of the teeth is surgically modified by reshaping and removing irregularities of the bone supporting the teeth to a more physiologic, hygienic form. This typically may involve the removal of some supporting bone, defined as an ostectomy, and removal of non-supporting bone, defined as an osteoplasty. Bone removal during osseous surgery is often minimized due to natural bony defects which often exhibit some degree of natural fill upon healing. Extensive bone removal may impede the natural bone fill within the bony defects upon healing and can also inhibit integration of the bone regenerative or replacement graft materials. The degree of osseous contouring is quite often completed to accommodate full thickness flap closure. The treatment goals of osseous surgery include: surgical access to the defects in the alveolar (supporting) bone with access to the affected roots allowing instrumentation to facilitate the removal of the causative factors of disease; removal of the plaque and calculus that promotes the unhealthy, disease environment; promotion of the regeneration of the periodontal attachment between supporting bone and the cementum (outside surface) of the root surface; maintenance of an adequate amount of attached gingiva to minimize loss of alveolar crest height; improvement of clinical attachment levels which reduces probing depths.

Note:

A group may define covered dental services under either their dental or medical plan, as well as to define those services that may be subject to dollar caps or other limits. The plan documents outline covered benefits, exclusions and limitations. The health plan 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 the health plan. Some plans exclude coverage for services that the health plan considers either medically or dentally necessary. When there is a discrepancy between the health plan's clinical policy and the group's plan documents, the health plan will 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 the health plan will adhere to the applicable regulatory requirement.

Definitions

Peer Reviewed Publications:

References:

1. Proestakis G, Soderholm G, et al. Gingivectomy versus flap surgery: the effect of the treatment of infra-bony defects. A clinical and radiographic study. *Journal of Clinical Perio* 1992a; 19:497-508.
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5. Parameter on Chronic Periodontitis with Advanced Loss of Periodontal Support. Parameters of Care. Supplement *J Perio* 2000; 71: 856-858.
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7. Parashis AO, Anagnou-Vareltzides A and Demetriou, N. Calculus Removal from multi-rooted teeth with and without surgical access. *Journal of Clinical Perio* 1993; 20: 63-68.
8. American Dental Association. Current Dental Terminology. CDT 2011-2012; 231 (© ADA 2010).
9. Prichard JP. The infrabony technique as a predictable procedure. *Journal of Perio* 1957; 28:202.
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11. Persson R and Swindsen J. The role of periodontal probing depth in clinical decision making. *Journal of Clinical Perio* 1990; 17:96-101.
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13. Treatment of Plaque Induced Gingivitis, Chronic Periodontitis, and Other Clinical Conditions. Academy Report. American Academy of Periodontology. *J Perio* 2001, 72: 1790-1800.
14. Palcanis KG. Surgical pocket therapy. *Annals of Periodontology* 1996; 1:589-617.
15. Greenstein G. Non-surgical periodontal therapy in 2000: a literature review. *JADA* 2000; 131:1580-1592.
16. American Academy of Periodontology. Treatment of gingivitis and periodontitis (position paper). *Amer Acad Perio*. Dec 1997.
17. Buchanan SA and Robertson PA. Calculus removal by scaling/root planing with and without surgical access. *J Perio* 1987; 58:159-163.
18. Caffesse RG, Sweeney PL and Smith BA. Scaling and root planing with and without periodontal flap surgery. *J Clin Perio* 1986; 13:205-210.
19. Journal of the American Dental Association. Consensus reports from the 1996 world workshop in periodontics. *JADA supplement* 1996; 129:40-S, 41-s.
20. Gher ME and Vernino AR. Root anatomy: a factor in inflammatory periodontal disease. *Int'l J Perio and Restorative Dentistry* 1981; 1(5):63-68.

Government Agency, Medical Society, and Other Authoritative Publications:

History

Status	Date	Action
Reviewed	07/10/17	modified criteria

Federal and State law, as well as contract language, and Dental Policy take precedence over Clinical UM Guidelines. We reserve the right to review and update Clinical UM Guidelines periodically. Clinical guidelines approved by the Clinical Policy Committee are available for general adoption by plans or lines of business for consistent review of the medical or dental necessity of services related to the clinical guideline when the plan performs utilization review for the subject. Due to variances in utilization patterns, each plan may choose whether to implement a particular Clinical

UM Guideline. To determine if review is required for this Clinical UM Guideline, please contact the customer service number on the member's card.

Alternatively, commercial or FEP plans or lines of business which determine there is not a need to adopt the guideline to review services generally across all providers delivering services to Plan's or line of business's members may instead use the clinical guideline for provider education and/or to review the medical or dental necessity of services for any provider who has been notified that his/her/its claims will be reviewed for medical or dental necessity due to billing practices or claims that are not consistent with other providers, in terms of frequency or in some other manner.

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