Effective 12/01/2025

Medical Coverage Policy

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Alveoloplasty

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INSTRUCTIONS FOR USE

The following Coverage Policy applies to health benefit plans administered by Cigna Companies. Certain Cigna Companies and/or lines of business only provide utilization review services to clients and do not make coverage determinations. References to standard benefit plan language and coverage determinations do not apply to those clients. Coverage Policies are intended to provide guidance in interpreting certain standard benefit plans administered by Cigna Companies. Please note, the terms of a customer's particular benefit plan document [Group Service Agreement, Evidence of Coverage, Certificate of Coverage, Summary Plan Description (SPD) or similar plan document] may differ significantly from the standard benefit plans upon which these Coverage Policies are based. For example, a customer's benefit plan document may contain a specific exclusion related to a topic addressed in a Coverage Policy. In the event of a conflict, a customer's benefit plan document always supersedes the information in the Coverage Policies. In the absence of a controlling federal or state coverage mandate, benefits are ultimately determined by the terms of the applicable benefit plan document. Coverage determinations in each specific instance require consideration of 1) the terms of the applicable benefit plan document in effect on the date of service; 2) any applicable laws/regulations; 3) any relevant collateral source materials including Coverage Policies and; 4) the specific facts of the particular situation. Each coverage request should be reviewed on its own merits. Medical directors are expected to exercise clinical judgment where appropriate and have discretion in making individual coverage determinations. Where coverage for care or services does not depend on specific circumstances, reimbursement will only be provided if a requested service(s) is submitted in accordance with the relevant criteria outlined in the applicable Coverage Policy, including covered diagnosis and/or procedure code(s). Reimbursement is not allowed for services when billed for conditions or diagnoses that are not covered under this Coverage Policy (see "Coding Information" below). When billing, providers must use the most appropriate codes as of the effective date of the submission. Claims submitted for services that are not accompanied by covered code(s) under the applicable Coverage Policy

will be denied as not covered. Coverage Policies relate exclusively to the administration of health benefit plans. Coverage Policies are not recommendations for treatment and should never be used as treatment guidelines. In certain markets, delegated vendor guidelines may be used to support medical necessity and other coverage determinations.

Overview

This Coverage Policy addresses alveoloplasty, a surgical procedure for recontouring supporting bone, sometimes in preparation for a prosthesis. This procedure may be spelled as alveoplasty.

Coverage Policy

Coverage for Oral Surgery, including Alveoloplasty, varies across plans. Refer to the customer's benefit plan document for coverage details.

If there are benefits available, alveoloplasty (CPT 41874) is considered medically necessary when ANY of the following criteria are met:

- in an individual with a congenital defect or developmental malformation which interferes with function
- following an accidental injury to sound natural teeth that occurs after the date of coverage within 12 months of the loss of natural teeth, or as specified in the benefit plan language. Note: Chewing injuries are not considered accidental injuries.
- loss of natural teeth due to oral cancer which interferes with function. In order to be eligible, the loss of teeth must have occurred while covered under the plan and replacement must occur within 24 months of the loss of natural teeth, or as specified in the benefit plan language.
- when provided in preparation for, or in the course of, treatment (i.e., radiation, chemotherapy) for head and neck cancer

Alveoloplasty is considered NOT medically necessary for any other indication including but not limited to wisdom teeth extraction.

Health Equity Considerations

Health equity is the highest level of health for all people; health inequity is the avoidable difference in health status or distribution of health resources due to the social conditions in which people are born, grow, live, work, and age.

Social determinants of health are the conditions in the environment that affect a wide range of health, functioning, and quality of life outcomes and risks. Examples include safe housing, transportation, and neighborhoods; racism, discrimination and violence; education, job opportunities and income; access to nutritious foods and physical activity opportunities; access to clean air and water; and language and literacy skills.

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General Background

An alveoloplasty, sometimes also called an alveoplasty, is a surgical procedure for recontouring the maxillary and/or mandibular alveolar ridge, sometimes in preparation for a prosthesis. The goal for alveoloplasty is to achieve optimal tissue support for the planned prostheses, while preserving as much bone and soft tissue as possible.

Alveolar bone develops with tooth formation during facial growth. The aim of preprosthetic surgery is to restore function and form due to tooth loss arising from congenital deformity, trauma, or ablative surgery. The surgical/prosthetic collaboration begins with treatment planning based on diagnostics that are adequate to ensure appropriate procedure selection. The treatment team must determine whether existing anatomy is satisfactory and, if not, what intervention might best serve the needs of the patients and the restoring dentist. Dental prostheses insertion requires adequate interarch space and a clear path free of bony protuberances, sharp undercuts, and bulbous soft tissue prominences. Applicable procedures may include alveoloplasty, tuberosity reduction, torus, and exostosis removal. Comfort is related to the seating of a prosthesis on good-quality soft tissue overlying smooth bone. Examples of procedures that may enhance comfort are alveoloplasty, lingual balcony reduction, removal of redundant soft tissue, frenectomy, and skin graft vestibuloplasty.

Both alveoloplasty and alveolar ridge preservation procedures are aimed at preparing the jawbone for dental restorations, but they address different aspects of bone remodeling after tooth extraction. Alveoloplasty involves reshaping and smoothing the bone after extraction, often to create a more suitable surface for dentures or other restorations while alveolar ridge preservation (ARP) focuses on minimizing bone loss immediately after extraction to preserve the original shape of the ridge for future implant placement.

CPT 41874 Alveoloplasty, each quadrant: The physician alters the contours of the alveolus by selectively performing alveoloplasty to remove sharp areas or undercuts of alveolar bone. The physician makes incisions in the mucosa overlying the alveolus, exposing the alveolar bone. Drills, osteotomes, or files are used to contour the bone. The mucosa is sutured in place over the contoured bone.

Indications for the Use of Alveoloplasty
Reshaping of the alveolar bone has multiple indications in maxillofacial surgery. All techniques used provide resurfacing or restructuring of the alveolar bone to provide a functional skeletal relationship. The indications for alveoloplasty range from debulking procedures for pathologic conditions of the bone to recontouring the bone in preparation for prosthetic rehabilitation.

Simple plasty of the alveolar bone is defined as the reshaping of the alveolar bone during dental extraction surgery. If the alveolus has a sharp edge, the bone must be smoothed down to help with the healing process and prevent sequestra formation and pain.

The contouring of the alveolus after extractions also aids in prosthetic rehabilitation, whether with dental implants or dentures. Any sharp bone projections or edges under dentures create pain when the prostheses compresses and rubs against them. The shape of the ridges for denture fabrication should maintain as much width and adequate height as possible to distribute forces properly. Undercuts must be addressed to allow for smooth placement of the prostheses. The goals are to lose as little bone as possible after extraction, to maintain a wide alveolar ridge with the ideal U shape, and to get rid of undercuts that prevent smooth use and placement of a removable prosthesis.

With respect to dental implant rehabilitation, the reshaping of the alveolus is done to provide a stable base to place the dental implants and to create enough room for the prosthetic components necessary to restore the dentition. This may require removing some of the bone, which may be counterintuitive to the protocols for creating dentures.

Limitations and Contraindications
Alveoloplasty is limited by the local architecture and volume of bone in the surgical site. It is contraindicated if removing the bone would harm vital structures. It also is contraindicated if the patient does not need bone removed or recontoured.

Congenital Defects
Cleft lip with or without cleft palate is among the most common birth defects. The Centers for Disease Control and Prevention (CDC) estimates that in the United States:

- About 1 in every 1,050 babies is born with cleft lip with or without cleft palate.
- About 1 in every 1,600 babies is born with cleft palate alone.

In the earliest days of development in the womb, there is normally a cleft between the right and left sides of the lip and the roof of the mouth (palate). Sometime during the 6th to 11th week of pregnancy, this split comes together to form the lips and mouth. If the tissue doesn't join, it can cause a cleft lip or a cleft palate. The opening in a cleft lip can be a small slit or a large split that extends from the lip into the nose. The cleft can be on one side or both sides of the lip, or in the middle. The opening in a cleft palate may affect the front, or back, or both parts of the palate. A baby may be born with only a cleft lip or a cleft palate, but some babies are born with both. Children with a cleft lip or a cleft palate, depending on the size of the openings, may have problems eating and breathing. As they grow older, they may also have speech and language delays. Children with cleft lip or palate are also more likely to have ear infections, hearing loss, and problems with their teeth.

Congenitally missing teeth (CMT) - Tooth agenesis is a condition in which a person is born without some of their teeth. Tooth agenesis can involve both primary (baby) and permanent (adult) teeth. But it most commonly affects permanent teeth. Tooth agenesis affects between 3% and 10% of the U.S. population. It's slightly more common in females. There are three main types of dental agenesis:

- Anodontia: The complete absence of teeth.
- Hypodontia: The absence of one to six teeth.
- Oligodontia: The absence of six or more teeth.

Ectodermal dysplasias (ED) – ED are disorders that affect the skin, sweat glands, hair, teeth, and nails. Some individuals with ED may also have cleft lip and/or palate. ED can additionally cause problems with the immune system as well as hearing and vision. More than 180 specific types of this condition have been identified. Ectodermal dysplasias occur when the outer layer of tissue (ectoderm) of the embryo does not develop normally. If two or more body structures derived from the ectoderm are affected, a person is considered to have ED. ED is a rare disease, defined in the U.S. as a condition that affects fewer than 200,000 people

Dental Trauma
Dental trauma is any injury to the teeth, gums, jawbone or soft tissues of the mouth. Accidents, such as falls, car wrecks and sports-related injuries are the main cause of traumatic dental injuries. Early treatment provides the best chance for full recovery. A significant dental injury can

cause an individual to be more vulnerable to oral health issues. Possible consequences of dental trauma may include tooth loss, pain, difficulty chewing or swallowing, and speech issues.

Head and Neck Cancer (HNC)
Head and neck cancer (HNC) survival has improved in recent decades and the population of HNC survivors continues to grow. Generally, the HNC patient oral health needs are complex, requiring multidisciplinary collaboration among oncologists and dental professionals with special knowledge and training in the field of oral oncology. All treatment modalities for HNC produce oral complications, including surgery (e.g. mutilation and physiologic changes), radiation therapy (e.g. mucositis, dysphagia, hyposalivation, osteoradionecrosis), and neoadjuvant, adjuvant and/or concurrent chemotherapy (e.g. mucositis, taste changes, immune suppression). Additionally, newer targeted therapies may also result in oral mucosal complications.

Professional Societies/Organizations

No guidelines were found / accessible for:

- The Academy of Prosthodontics
- American Academy of Maxillofacial Prosthetics.
- American Association of Oral and Maxillofacial Surgeons. (membership required for access to their Parameters of Care)

Medicare Coverage Determinations

	Contractor	Determination Name/Number	Revision Effective Date
NCD		No determination found	
LCD		No determination found	

Note: Please review the current Medicare Policy for the most up-to-date information.
(NCD = National Coverage Determination; LCD = Local Coverage Determination)

Coding Information

Notes:

1. This list of codes may not be all-inclusive since the American Medical Association (AMA) and Centers for Medicare & Medicaid Services (CMS) code updates may occur more frequently than policy updates.
2. Deleted codes and codes which are not effective at the time the service is rendered may not be eligible for reimbursement.

Considered Medically Necessary when criteria in the applicable policy statements listed above are met:

CPT®* Codes	Description
41874	Alveoloplasty, each quadrant (specify)

***Current Procedural Terminology (CPT®) ©2024 American Medical Association: Chicago, IL.**

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Revision Details

Type of Revision	Summary of Changes	Date
Initial Review	• New policy statement	12/01/2025