Medical Coverage Policy

Effective Date.....4/15/2025
Next Review Date.....4/15/2026
Coverage Policy Number..... 0335

Otoplasty and External Ear Reconstruction

Table of Contents

Related Coverage Resources

Cochlear and Auditory Brainstem Implants
Hearing Aids
Prosthetic Devices
Scar Revision

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 otoplasty and external ear reconstruction. Otoplasty, a procedure to correct protruding ears, is performed to improve the appearance of ears. External ear reconstruction is a surgical procedure that attempts to reconstruct the external ear to normal anatomical shape.

Coverage Policy

Coverage for otoplasty and/or external ear reconstruction is dependent on benefit plan language and may be subject to the provisions of a cosmetic and/or reconstructive surgery benefit. In addition, this service may be governed by state mandates. Please refer to the applicable benefit plan documents and schedule of copayments to determine benefit availability and the terms, conditions, and limitations of coverage.

External ear reconstruction for the treatment of an external ear deformity or the absence of an external ear is considered medically necessary when ANY of the following criteria is met:

- hearing is expected to improve
- reconstruction is necessary to allow the use of a conventional air conduction hearing aid
- frontal, lateral, and posterior photographs with eyewear being worn demonstrate that the external ear deformity is preventing the functional ability to use eyewear for the correction of a current visual deficit

Non-surgical external ear molding is considered medically necessary for a congenital external ear malformation in an individual with a functional impairment of hearing.

Each of the following are considered cosmetic in nature and not medically necessary when performed solely to improve physical appearance:

- external ear reconstruction
- ear molding

Otoplasty (CPT® code 69300) is considered cosmetic in nature and not medically necessary for ANY indication, including ALL of the following:

- prominent/protruding ears
- lop ears
- cupped ears
- constricted ears
- performed to increase the individual's comfort level when wearing protective or assistive equipment (e.g., helmet, headphones, mask)

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.

It is estimated that one in every 3800 babies is born with anotia/microtia, with males 2.5 times more frequently affected than females. Also, there is a higher prevalence of microtia in Hispanic/Latinix (3.13 per 10,000) and Native America/Native Alaskan (4.67 per 10,000) populations compared to an overall prevalence of 1.69 per 10,000 live births (Zopf, et al., 2021).

Most causes of anotia/microtia are unknown although some cases are found to be caused by a genetic mutation or taking Accutane during pregnancy. Women diagnosed with diabetes prior to pregnancy and a maternal diet lower in carbohydrates and folic acid have a higher risk for having a baby born with anotia or microtia compared to their counterparts (CDC, 2024).

General Background

Abnormal ear development may result from trauma or disease although most often the deformity is congenital. While some abnormalities require no intervention and will self-correct (e.g., caused by abnormal positioning in utero), some may be corrected non-surgically (e.g., ear molds), and others may require surgical correction.

Nonsurgical treatment (e.g., ear molds) is generally employed as treatment shortly after birth when infant ear cartilage is soft and moldable. Ear molds used to improve the appearance of the external ear in the absence of a functional deficit is considered cosmetic.

External ear reconstruction involves various degrees of surgical repair and may be performed to correct the congenital absence of an external ear for conditions such as microtia and anotia or to correct an external ear that has been altered as a result of trauma or surgery. External ear deformities usually do not result in a functional deficit, such as hearing impairment (i.e., inability to hear normal conversation). In the absence of hearing impairment or other functional deficit external ear deformities generally do not require any intervention and treatment is considered cosmetic.

Otoplasty is a procedure performed solely for cosmetic purposes.

Congenital Abnormalities

Prominent/Protruding Ears: Prominent ears are a congenital abnormality in which the ears tend to project excessively from the skull without causing a functional deficit (Liaw, et al., 2017). This condition may occur as a result of an inadequately formed antihelix (i.e., the outer frame of the auricle), an overdeveloped or excessively deep concha (i.e., hollow portion of the outer ear), or a combination of these conditions (American Society of Plastic Surgeons [ASPS], 2005; Reaffirmed June 2015). Ear prominence is typically defined as a protrusion of the helix 2 cm or more from the postauricular scalp. Otoplasty performed to correct prominent ears involves recreating an antihelical fold and possibly in setting or resecting the concha to decrease the

prominence. The primary goal of surgical correction for prominent/protruding ears is improvement of physical appearance (i.e., cosmesis). In comparison to conventional methods which usually involve a post-auricular incision, incisionless otoplasty is a noninvasive method of correction under investigation that involves use of percutaneous sutures and scoring of the cartilage. It has been suggested incisionless otoplasty may result in fewer complications when compared to conventional methods.

Microtia: Microtia describes an incompletely formed ear and is commonly associated with congenital aural atresia (Murakami, et al., 2010; Kelley and Scholes, 2007). It may occur as a single disorder, as a feature of hemifacial microsomia complex (i.e., one side of the face does not grow in proportion to the other side), or as part of a congenital syndrome, such as Treacher Collin's syndrome. While there is no universally accepted classification system for microtia, a system that assigns grades based on the severity of the deformity has been adopted (Murakami, et al., 2010; Zim, 2003). Microtia may be divided into the following categories:

Type I	A mildly deformed ear that has a slightly dysmorphic helix and antihelix. The external auditory meatus is usually present.
Type II	Ears that have all major structures present to some degree, but with an absolute deficiency of tissue; surgical correction requires the addition of cartilage and skin; the external auditory meatus is present but may demonstrate some degree of deformity. The auricle is usually hook-, S- or question-mark shaped in appearance.
Type III	Few or no recognizable landmarks of the auricle or canal although the lobule is usually present and positioned anteriorly.

Microtia may result in subtle abnormalities of the size, shape and location of the pinna and ear canal, or it may occur as a major deformity, with small remnants of skin and cartilage, as well as absence of the ear canal opening. Mild ear deformities are associated with altered physical appearance and are usually not associated with a functional deficit. Deformities that may be considered Type I deformities include mildly constricted ears, lop-ear deformities (characterized by an absence of the antihelical fold causing the ear to fall forward) and cupped-ear deformities (excessive cartilage of the ear canal causing the ear to project outward). With these deformities, all major structures are present to some degree.

Type II deformities may include mini-ear and severe cup deformities. The external auditory meatus is present, although it may demonstrate some degree of stenosis.

Anotia is the complete absence of the external ear and auditory canal and may be considered Type III microtia, although a few sources consider this a fourth degree of severity.

The inner ear function of the affected ear usually remains adequate, resulting in some ability to hear on the affected side (Bonilla, 2023) and the contralateral ear is usually normal, allowing for normal development of speech. However, sensorineural, conductive, or mixed hearing loss may be present in the microtia patient (Kelley and Scholes, 2007; Beahm and Walton, 2002) and it has been reported that hearing impairment may be reduced by approximately 40% on the affected side. Congenital deformities of the ear may be coupled with abnormalities involving the external ear canal (EAC) and tympanic membrane; consequently, these abnormalities may affect sound conduction. Microtia has also been associated with middle ear abnormalities. For example, patients with complete or partial stenosis of the EAC commonly have severe ossicular malformations (Kim, et al., 2002). Additionally, malformations of the external ear can interfere with the ability to wear hearing aids or glasses, which is of particular importance given the high incidence of craniofacial or ocular abnormalities associated with microtia (Cuccolo, et al., 2019). Ear reconstruction may be performed to improve physical appearance for patients with microtia,

although, when considering surgery, emphasis is also placed on restoring sufficient hearing to allow normal speech development. The aim of reconstructive surgery is to improve hearing to a point where the child may not need a hearing aid or to provide an ear canal and pinna so that the child can use an air-conduction hearing aid (Haddad, 2025). Other operations, such as canal or middle ear reconstruction, may be performed to improve patient outcomes. Surgery performed to improve hearing is recommended if there are bilateral deformities resulting in conductive hearing loss (Haddad, 2025) or for unilateral microtia with impaired hearing of the normal ear. In patients with bilateral microtia, bone conduction hearing aids are often recommended (Murakami, et al., 2010; Kelley and Scholes, 2007). Hearing amplification is not usually required for unilateral atresia, although binaural hearing is superior to monaural in terms of sound localization and speech perception.

Although it may be performed on adults, it is generally recommended that external ear reconstruction for treatment of ear deformities, more specifically microtia, be performed when the patient is between ages six and eight. By this age, the ear has reached 85–90% of its adult size. In addition, at this time, the patient's rib size is sufficient to allow a rib graft. Early surgery may also result in the avoidance of social problems for the child. In cases of bilateral microtia, reconstructions may begin as early as age four.

Trauma/Neoplasm
Trauma to the ear may result from burn injuries, human or animal bites, falls or motor vehicle accidents. The unavoidable exposure to sun of the helical rim of the ear contributes to the development of skin neoplasm and removal with precise margin control is recommended. Despite efforts to preserve healthy tissue in the presence of tissue injury or neoplasm, reconstruction is often necessary to improve physical appearance and function. For some patients, auricular prostheses may be considered an alternative to ear reconstruction. Nonetheless, reconstruction to improve physical appearance in the absence of improving function is considered cosmetic.

Cochlear Implant
Sensorineural hearing loss may occur as a result of congenital defects, disease or trauma of the inner ear, and can cause significant hearing impairment. When the hearing loss becomes profound and a hearing aid is ineffective, a cochlear implant may maximize hearing ability for patients.

Cochlear implants have two integral components:

- The internal component consists of a receiver-stimulator connected to an infracochlear electrode array made up of electrode rings that are integrated into a silicone carrier. The stimulator is implanted in the skull near the cochlea and is connected to the electrode array via a lead wire.
- The external component consists of a microphone worn on the external ear, a speech processor worn at ear-level or on the body, and a transmitter worn behind the ear.

Although considered rare, sensorineural hearing loss may occur with congenital ear anomalies such as aural atresia and microtia. Aural atresia is a congenital defect characterized by malformations of the external and middle ear structures. Consequently, otoplasty may be considered as part of the reconstructive process and implantation of a cochlear device. Cochlear microphone placement may be difficult in some cases and external ear reconstruction may be required to facilitate use of the device (Lin, et al., 2005).

Treatment
Non-surgical treatment of congenital external ear malformation includes splinting and molding. The ideal treatment is initiated within the first two weeks of life and may continue until the infant is three months old. Splints should be light, inexpensive, quick to fabricate, adjustable to complicated cartilage contours, simple to apply and remove, and easy to reform. The molding

process involves the application of a rigid cradle that surrounds the patient's auricle and adheres firmly to the skin (Feijen, et al., 2020; Schultz, et al., 2017). Nonsurgical treatment of microtia, involving a prosthetic device, is an alternative to surgical correction. Bone-anchored hearing aid devices are often used to improve conductive hearing loss for cases of bilateral microtia involving hearing impairment.

Surgical repair is generally performed for cosmetic purposes and in some rare situations, functional reasons. The overall goal is to reconstruct an ear that is normal in appearance and function. For some cases an incision is made behind the ear to reduce one or more components, for other more extensive cases reconstruction may involve cartilage reshaping and sculpturing. The reconstruction surgery for severe cases typically involves multiple stages that are performed at least three to six months apart. The initial stages involve the removal of scarred, deformed tissue and the implantation of costal cartilage (e.g., rib cartilage grafting). Additional stages are performed for lobule transfer, postauricular skin grafting and tragus reconstruction (Murakami, et al., 2010). Although numerous implants are available for surgical reconstruction of the ear, the gold standard of therapy for treating microtia deformities is autologous rib cartilage grafting. In cases where there is associated aural atresia or decreased hearing in the contralateral normal ear, a separate surgery is indicated to restore hearing function. Medpor ear reconstruction (i.e., porous polyethylene framework and temporoparietal fascial flap) is a well-established alternative choice of treatment for microtia and atresia surgery. Medpor ear reconstruction involves a single-stage reconstruction with a Medpor implant versus multiple-staged approach using rib graft reconstruction. There are several types of porous polyethylene implants which include, but are not limited to Medpor, Omnipor and Supor.

It is important to recognize that the ears of each person often show some asymmetry with various components of the ear and in its relative proximity to the scalp. However, unless the asymmetry adversely affects a person's ability to use eyewear effectively, then treatment is considered cosmetic.

Complications associated with otoplasty and/or external ear reconstructive procedures include bleeding, infection and possibly pneumothorax if a rib graft is used. Complications associated with middle ear surgery for improvement of hearing include restenosis of the external auditory canal and damage to the facial nerve (Bonilla, 2023).

Professional Societies/Organizations
American Academy of Pediatrics (AAP): Guidelines and/or position statements from the AAP do not comment on the performance of otoplasty for treatment of external ear deformities.

American Society of Plastic Surgeons (ASPS): According to the ASPS, otoplasty is considered a reconstructive surgery that may be performed in children or adults, although the procedure is more common in children (ASPS, 2005; Reaffirmed June 2015).

Medicare Coverage Determinations

	Contractor	Determination Name/Number	Revision Effective Date
NCD	National	No National Coverage Determination found	
LCD		No Local Coverage 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 and 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.

External Ear Reconstruction

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

CPT®* Codes	Description
69310	Reconstruction of external auditory canal (meatoplasty) (eg, for stenosis due to injury, infection) (separate procedure)
69320	Reconstruction external auditory canal for congenital atresia, single stage
69399†	Unlisted procedure, external ear

†**Note: Considered Medically Necessary when used to report ear molding and the above criteria in the policy statement is met.**

Considered Medically Necessary when submitted with a medically necessary procedure:

CPT®* Codes	Description
20910	Cartilage graft; costochondral
20912	Cartilage graft; nasal septum
21230	Graft; rib cartilage, autogenous, to face, chin, nose or ear (includes obtaining graft)
21235	Graft; ear cartilage, autogenous, to nose or ear (includes obtaining graft)

Otoplasty

Considered Cosmetic/Not Medically Necessary

CPT®* Codes	Description
69300	Otoplasty, protruding ear, with or without size reduction

References

1. American Society of Plastic Surgeons (ASPS). Ear deformity: prominent ears: recommended criteria for third-party payer coverage [position paper]. Socioeconomic Subcommittee. Approved by ASPS Board of December 2005. Reaffirmed June 2015. Accessed Feb 2025. Available at URL address: http://www.plasticsurgery.org/for-medical-professionals/legislation-and-advocacy/health-policy-resources/recommended-insurance-coverage-criteria.html

2. Beahm EK, Walton RL. Auricular reconstruction for microtia: Part I: anatomy, embryology, and clinical evaluation. Plast Reconstr Surg. 2002 Jun:109(7):2473-82.

3. Bonilla JA. Microtia surgery in children. Medscape. Updated Oct 4, 2023. Accessed Feb 14, 2025. Available at URL address: http://www.emedicine.com/ped/topic3003.htm

4. Centers for Medicare and Medicaid Services (CMS). Local Coverage Determinations (LCDs) alphabetical index. Accessed February 12, 2025. Available at URL address: https://www.cms.gov/medicare-coverage-database/reports/local-coverage-proposed-lcds-alphabetical-report.aspx?proposedStatus=A&sortBy=title

5. Centers for Medicare and Medicaid Services (CMS). National Coverage Determinations (NCDs) alphabetical index. Accessed February 13, 2025. Available at URL address: https://www.cms.gov/medicare-coverage-database/reports/national-coverage-ncd-report.aspx?chapter=all&labOnly=allncd&sortBy=title

6. Cuccolo NG, Zwierstra MJ, Ibrahim AMS, Peymani A, Afshar S, Lin SJ. Reconstruction of Congenital Microtia and Anotia: Analysis of Practitioner Epidemiology and Postoperative Outcomes. Plast Reconstr Surg Glob Open. 2019 Jun 19;7(6):e2318.

7. Feijen MMW, van Cruchten C, Payne PE, van der Hulst RRWJ. Non-surgical Correction of Congenital Ear Anomalies: A Review of the Literature. Plast Reconstr Surg Glob Open. 2020 Nov 24;8(11):e3250.

8. Haddad J. Congenital Malformations of the Ear. In: Kliegman RM, St Geme JW, Blum NJ, Shah SS, Tasker RC, Wilson KM. Nelson Textbook of Pediatrics. 22nd edition. Philadelphia PA: Elsevier Inc; 2025. Ch 678. Pgs 3995-3997.e1.

9. Kelley PE, Scholes MA. Microtia and congenital aural atresia. Otolaryngol Clin North Am. 2007 Feb;40(1):61-80, vi.

10. Kim SY, Bothwell NE, Backous DD. The expanding role of the otolaryngologist in managing infants and children with hearing loss. Otolaryngol Clin North Am. 2002 Aug;35(4):699-710.

11. Liaw J, Patel VA, Carr MM. Congenital anomalies of the external ear. Operative Techniques in Otolaryngology. 2017 June; 28(2): 72-76.

12. Lin K, Marrinan MS, Shapiro WH, Kenna MA, Cohen NL. Combined microtia and aural atresia: issues in cochlear implantation. Laryngoscope. 2005 Jan;115(1):39-43.

13. Murakami CS, Quatela VC, Si K, Shvidler J. Reconstruction surgery of the ear: Microtia Reconstruction. In: Cummings CW, Flint PW, Haughey BH, Robbins KT, Thomas TR, Harker LA, et al., editors. Otolaryngology: Head and Neck Surgery. 5th ed. Copyright ©2010. Chapter 192.

14. Centers for Disease Control and Prevention. Anotia/Microtia. Page last reviewed: Dec 26, 2024. Accessed Feb 13, 2025. Available at URL address: https://www.cdc.gov/birth-defects/about/anotia-microtia.html

15. Schultz K, Guillen D, Maricevich RS. Newborn Ear Deformities: Early Recognition and Novel Nonoperative Techniques. Semin Plast Surg. 2017 Aug;31(3):141-145.

16. Zim SA. Microtia reconstruction: an update [review]. Curr Opin Otolaryngol Head Neck Surg. 2003 Aug;11(4):275-81.

17. Zopf D, Knecht E, Kim J. Microtia Reconstruction. Flint PW, Francis HW, Haughey, BH, Lesperance, V, Lund, VJ, et al editors. In: Cummings Otolaryngology: Head and Neck Surgery. 7th Edition Philadelphia PA: Elsevier Inc; 2021. Ch 195. Pgs 2917-2925.e1.

Revision Details

Type of Revision	Summary of Changes	Date
Annual Review	No clinical policy statement changes.	4/15/2025
Annual Review	• Revised the policy statement for photographs under the external ear reconstruction section. • Removed the policy statement for 'functional need for eyewear use' under the non-surgical external ear molding section. • Added a policy statement for 'an individual's comfort level' in the not medically necessary section for otoplasty.	4/15/2024