



CIGNA MEDICAL COVERAGE POLICY

The following Coverage Policy applies to all health benefit plans administered by CIGNA Companies including plans formerly administered by Great-West Healthcare, which is now a part of CIGNA.

Subject Otoplasty/External Ear Reconstruction

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Cochlear and Auditory Brainstem Implants
 Facial Protheses, External
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 Scar Revision

INSTRUCTIONS FOR USE

Coverage Policies are intended to provide guidance in interpreting certain **standard** CIGNA HealthCare benefit plans. Please note, the terms of a customer's particular benefit plan document [Group Service Agreement (GSA), 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 supercedes** 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. 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. Proprietary information of CIGNA. Copyright ©2011 CIGNA

Coverage Policy

Coverage for otoplasty/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.

Under many benefit plans formerly administered by Great-West Healthcare reconstructive services and surgery are covered when the reconstruction services are being performed for one of the following: 1) to relieve severe physical pain caused by an abnormal body structure; or 2) to treat a functional impairment caused by an abnormal body structure or to restore an individual's normal appearance, regardless of whether a functional impairment exists when the abnormality results from a documented illness that occurred within the preceding 12 months. .

Please refer to the applicable benefit plan documents and schedule of copayments to determine benefit availability and the terms, conditions and limitations of coverage.

If coverage for otoplasty/external ear reconstruction is available, the following conditions of coverage apply.

CIGNA covers otoplasty/external ear reconstruction as medically necessary for EITHER of the following indications:

- correction of an external ear deformity associated with an abnormality of the external auditory canal (e.g., stenosis) when there is a significant hearing loss, believed to be permanent, and for which the procedure is intended to improve the hearing impairment
- as part of a staged reconstruction for an absent or inadequate external ear, when the reconstruction involves a cochlear implant, and an otoplasty is required for proper functioning of the device

Under many benefit plans, CIGNA does not cover otoplasty/external ear reconstruction when performed solely for the purpose of improving or altering appearance or self-esteem, or to treat psychological symptomatology or psychosocial complaints related to one's appearance. Conditions for which otoplasty are generally considered cosmetic and not medically necessary include, but are not limited to:

- prominent/protruding ears
- lop ears
- cupped ears
- constricted ears

General Background

Otoplasty is a procedure that attempts to reconstruct the external ear to normal anatomical shape and appearance. It is frequently referred to in the medical literature as external ear reconstruction. Otoplasty is generally performed solely for cosmetic purposes; to improve the appearance of prominent or protruding ears. However, it 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. External ear deformities that do not result in significant functional hearing impairment (i.e., inability to hear normal conversation) do not require any intervention; treatment would be considered cosmetic in nature and not medically necessary.

Congenital Abnormalities

Prominent/Protruding Ears: Prominent ears are a congenital abnormality in which the ears tend to project excessively from the skull. 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). Normal prominence is defined as 1.2–2.0 cm from the post-auricular scalp to the lateral aspect of the superior helix. 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 inseting or resecting the concha to decrease the prominence. The primary goal of surgical correction for prominent ears is improvement of physical appearance (i.e., cosmesis).

Microtia: Microtia describes an incompletely formed ear and is commonly associated with congenital aural atresia (Murakami and Quatela, 2005; Kelly 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 (Zim, 2003; Murakami and Quatela, 2005). Microtia may be divided into the following categories:

- Type I** A mildly deformed ear that typically 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 miniear 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, 2009) 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 (Beahm, Walton, 2002; Kelly, Scholes, 2007) 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; patients with complete or partial stenosis of the EAC commonly have severe ossicular malformations (Kim, et al., 2002).

Ear surgery 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. 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, 2004) or for unilateral microtia with impaired hearing of the normal ear (Medicare Services Advisory Committee [MSAC], 2000). In patients with bilateral microtia, bone conduction hearing aids are often recommended (Murakami, Quatela, 2005; Kelly, 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 otoplasty 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 intracochlear 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.

Treatment

Minor deformities in ear shape may be overcome by early splinting or taping of a newborn child's ear (Burns, Blackwell, 2004). 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. 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, Quatela, 2005). 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.

Complications associated with otoplasty 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, 2009).

Professional Societies/Organizations

Guidelines and/or position statements from the American Academy of Pediatrics do not comment on the performance of otoplasty for treatment of external ear deformities. According to the American Society of Plastic Surgeons (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).

Summary

Otoplasty, often referred to as external ear reconstruction, is frequently performed to improve physical appearance. When the procedure is performed solely to improve physical appearance, treatment is considered cosmetic. For severe ear deformities, there may be associated loss of hearing, requiring additional surgical procedures to correct the functional deficit. The published, peer-reviewed scientific literature provides evidence to support that when performed in cases involving canal malformation, otoplasty in combination with auricular reconstruction and atresia repair, can be effective in improving hearing impairment for selected cases. Although rare, otoplasty may also be considered medically necessary when performed as part of a reconstructive process involving cochlear implantation if difficulties arise with cochlear microphone placement.

Coding/Billing Information

Note: This list of codes may not be all-inclusive.

Covered when medically necessary as outlined in this policy and when used to report otoplasty/ear reconstruction services:

CPT®* Codes	Description
69300	Otoplasty, protruding ear, with or without size reduction
69399	Unlisted procedure, external ear

ICD-9-CM Diagnosis	Description
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Codes	
380.32	Acquired deformities of auricle or pinna
744.01	Congenital absence of external ear causing impairment of hearing (absence of auditory canal, auricle)
744.02	Other congenital anomalies of external ear causing impairment of hearing (atresia, or stricture of auditory canal)
744.09	Anomalies of ear causing impairment of hearing, absence of ear, congenital (absence of ear, congenital)

Cosmetic/Not Medically Necessary and Not covered:

ICD-9-CM Diagnosis Codes	Description
744.21	Congenital absence of ear lobe
744.22	Macrotia
744.29†	Other congenital anomaly of ear; Bat ear, prominence of auricle
	All other codes

†Note: Not covered when used to report prominent ears and other such conditions as outlined in the policy.

*Current Procedural Terminology (CPT®) ©2010 American Medical Association: Chicago, IL.

References

1. Adamson PA, Doud Galli SK. Otoplasty. Cummings CW, Flint PW, Haughey BH, Robbins KT, Thomas JR, Harker LA, et al. editors. In: Otolaryngology: Head and Neck Surgery, 4th ed., Ch 36, Otoplasty. Copyright ©2005 Mosby, Inc.
2. Adamson PA, Litner JA. Otoplasty technique. Otolaryngol Clin North Am. 2007 Apr;40(2):305-18.
3. 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. Accessed February 14, 2011. Available at URL address: http://www.plasticsurgery.org/Documents/Medical_Professionals/Otoplasty2.pdf
4. Beahm EK, Walton RL. Auricular reconstruction for microtia: Part I: anatomy, embryology, and clinical evaluation. Plast Reconstr Surg. 2002 Jun;109(7):2473-82.
5. Bonilla JA. Microtia. In: eMedicine specialties > pediatrics > otolaryngology. Updated June 26, 2009. Accessed February 14, 2011. Available at URL address: <http://www.emedicine.com/ped/topic3003.htm>
6. Brent B. Reconstructive ear surgery. Microtia, Auricular Reconstruction. Copyright © 1998-2007. Accessed February 14, 2011. Available at URL address: <http://www.earsurgery.com/index.html>
7. Brent B. Technical advances in ear reconstruction with autogenous rib cartilage grafts: personal experience with 1200 cases. Plast Reconstr Surg. 1999 Aug;104(2):319-34.
8. Brodland DG. Auricular reconstruction. Dermatol Clin. 2005 Jan;23(1):23-14, v.
9. Burns JL, Blackwell SJ. Anotia. In: Townsend CM Jr, Beauchamp RD, Evers BM, Mattox KL, editors. Sabiston textbook of surgery. 17th ed. Philadelphia, PA: Saunders; 2004. Chapter 72: plastic surgery. p. 2189.

10. Ear Plastic Surgery. American Academy of Otolaryngology—Head and Neck Surgery (AAO-HNS). ENT link > ENT health information > ears. © Copyright 2011 American Academy of Otolaryngology — Head and Neck Surgery. Accessed February 14, 2011. Available at URL address: <http://www.entnet.org/HealthInformation/earPlasticSurgery.cfm>
11. FACES: The National Craniofacial Association. Last updated July 20, 2009. Accessed February 14, 2011. Available at URL address: <http://www.faces-cranio.org/>
12. Fearon J. A guide to understanding microtia. Dallas, TX: Children's Craniofacial Association (CCA); 1993. Originally published 1993 Jun. Accessed February 14, 2011. Available at URL address: <http://www.ccakids.com/synBook.asp>
13. Gosain AK, Kumar A, Huang G. Prominent ears in children younger than 4 years of age: what is the appropriate timing for otoplasty? *Plast Reconstr Surg*. 2004 Oct;114(5):1042-54.
14. Haddad J. Congenital malformations. In: Behrman RE, Kleigman RM, Jenson HB, editors. *Nelson textbook of pediatrics*. 17th ed. Philadelphia, PA: Saunders; 2004. Chapter 628. p. 2135.
15. Kelley P, Hollier L, Stal S. Otoplasty: evaluation, technique, and review. *J Craniofac Surg*. 2003 Sep;14(5):643-53.
16. Kelley PE, Scholes MA. Microtia and congenital aural atresia. *Otolaryngol Clin North Am*. 2007 Feb;40(1):61-80, vi.
17. 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.
18. Leach, LL Jr, Biavati MJ. Ear reconstruction. In: eMedicine specialties > otolaryngology and facial plastic surgery > reconstructive surgery. Updated Feb 11, 2009. Accessed February 14, 2011. Available at URL address: <http://www.emedicine.com/ent/topic79.htm>
19. 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.
20. McKinnon BJ, Jahrsdoerfer RA. Congenital auricular atresia: update on options for intervention and timing of repair. *Otolaryngol Clin North Am*. 2002 Aug;35(4):877-90.
21. Medicare Services Advisory Committee (MSAC); Doust J, Murray A-M, Vandervord J. Total ear reconstruction: MSAC application 1024 [assessment report]. Canberra, Australia: Commonwealth of Australia; 2000 Mar. Endorsed 2000 March 6 by the Commonwealth Minister for Health and Aged Care. Accessed February 14, 2011. Available at URL address: <http://www.msac.gov.au/internet/msac/publishing.nsf/Content/MSAC%20Completed%20Assessments%201021%20-%201040>
22. Murakami CS, Quatela VC. 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*. 4th ed. Copyright ©2005. Chapter 199a.
23. Owsley TG. Otoplastic surgery for the protruding ear [Abstract]. *Atlas Oral Maxillofac Surg Clin North Am*. 2004 Mar;12(1):131-9.
24. Renner G, Lane RV. Auricular reconstruction: an update. *Curr Opin Otolaryngol Head Neck Surg*. 2004 Aug;12(4):277-80.
25. Types of hearing loss. American Speech-Language-Hearing Association. For the public > hearing and balance > disorders and diseases. © 1997- 2009 American Speech-Language-Hearing Association.

Accessed February 14, 2011. Available at URL address:
<http://www.asha.org/public/hearing/disorders/types.htm>

26. Wood RJ, Jurkiewicz MJ. Ear reconstruction. In: Schwartz SI, G. Shires GT, Spencer FC, Daly JM, Fischer JE, Galloway AC, editors. Principles of surgery. New York, NY: McGraw-Hill Companies, Inc.; 1999. Chapter 43: plastic and reconstructive surgery.
27. Zim SA. Microtia reconstruction: an update [review]. Curr Opin Otolaryngol Head Neck Surg. 2003 Aug;11(4):275-81.

Policy History

<u>Pre-Merger Organizations</u>	<u>Last Review Date</u>	<u>Policy Number</u>	<u>Title</u>
CIGNA HealthCare	4/15/2010	0335	Otoplasty/External Ear Reconstruction
Great-West Healthcare	4/15/2010	95.237.06	Otoplasty

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