

Medical Policy



An Independent Licensee of the
Blue Cross and Blue Shield Association.

Title: Bone Anchored Hearing Aids (BAHA)

Professional

Original Effective Date: February 1, 2002
Revision Date(s): June 14, 2002; September 6, 2002; January 23, 2004; August 29, 2005; April 20, 2006
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Institutional

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DESCRIPTION

Conventional external hearing aids can be generally subdivided into air conduction hearing aids and bone conduction hearing aids. Air conduction hearing aids require the use of ear molds, which may be problematic in patients with chronic middle ear and ear canal infections, atresia of the external canal, or an ear canal that cannot accommodate an ear mold. In these patients, bone conduction hearing aids may be an alternative. External bone conduction hearing aids function by transmitting sound waves through the bone to the ossicles of the middle ear.

Semi-implantable bone conduction hearing aids have been investigated as an alternative. Although no longer marketed, the Audiant™ bone conductor was a device approved by the U.S. Food and Drug Administration (FDA) that consisted of an external processor that used transcutaneous inductive electromagnetic energy to cause vibration of an implanted titanium magnet screwed into the temporal bone. The currently marketed BAHA device (bone anchored hearing aid, Entific Medical System) is based on the same concept.

POLICY

A. Unilateral Conductive or mixed hearing Loss

These patients are unable, for various reasons, to wear a conventional hearing aid or undergo surgery to improve their hearing: Chronic otitic media (COM), Congenital malformations of the external/middle ear, other acquired malformations of the ear that preclude wearing of conventional hearing aids.

The criteria as taken from the FDA 510(K) document (#992873) are:

1. Average bone conduction threshold better (less) than 45 dB (at 500, 1000, 2000, 3000 Hz) in the indicated ear.
2. Speech discrimination score greater than 60% in the indicated ear.
3. Age 5 years or older.

B. Bilateral Conductive Hearing Loss

These patients have both ears involved in a conductive and mixed hearing loss and are not able to be treated with reconstructive surgery or conventional hearing aids for the above reasons. The criteria for the FDA 510(K) document #K011438 are:

1. Moderate (40 dB) to severe (70 dB) conductive hearing loss that is symmetric. That there is less than 10dB difference in average bone conduction (at 500, 1000, 2000, 4000 Hz) or less than 15 dB difference in bone conduction at individual frequencies.
2. Patients with mixed hearing loss with an average bone conduction better (less) than 45 dB in either ear (at 500, 1000, 2000, 4000 Hz)
3. Age 5 years or older.

C. Unilateral Sensorineural Hearing Loss (Single Sided Deafness; SSD)

These are patients where the nerve deafness in the indicated ear is so great that a conventional hearing aid no longer is useful. Typically, these patients are adults after acoustic neuroma surgery or sudden deafness and children with an unexplained deafness in one ear or after trauma. The implant is designed to stimulate the opposite (good ear) by bone conduction through the bones of the skull, therefore; the audiometric criteria are for the good ear. The criteria for the FDA 510(K) document #K021837 are:

1. Severe (70 dB) to profound (90 dB) hearing loss on one side with poor speech discrimination and unable to use a conventional hearing aid in that ear.
2. Normal hearing in the good ear as defined by an air conduction threshold equal to or better (less) than 20 dB (at 500, 1000, 2000, 3000 Hz).
3. Age 5 years or older.

CODING**CPT**

- 69710 Implantation or replacement of electromagnetic bone conduction hearing device in temporal bone (The Audiant bone conductor is a type of electromagnetic bone conduction hearing device. While this product is no longer actively marketed, patients with existing Audiant devices may require replacement, removal, or repair)
- 69711 Removal or repair of electromagnetic bone conduction hearing in temporal bone (The Audiant bone conductor is a type of electromagnetic bone conduction hearing device. While this product is no longer actively marketed, patients with existing Audiant devices may require replacement, removal, or repair)
- 69714 Implantation, osseointegrated implant, temporal bone, with percutaneous attachment to external speech processor/cochlear stimulator; without mastoidectomy (describe the BAHA device)

- 69715 Implantation, osseointegrated implant, temporal bone, with percutaneous attachment to external speech processor/cochlear stimulator; with mastoidectomy (describe the BAHA device)
- 69717 Replacement (including removal of existing device), osseointegrated implant, temporal bone, with percutaneous attachment of external speech processor cochlear stimulator; without mastoidectomy
- 69718 Replacement (including removal of existing device), osseointegrated implant, temporal bone, with percutaneous attachment of external speech processor cochlear stimulator; with mastoidectomy

DIAGNOSIS

These diagnoses are otherwise subject to medical policy as stated above

- 380.15 Chronic mycotic otitis externa
- 380.16 Other chronic infective otitis externa NOS
- 380.23 Other chronic otitis externa NOS
- 380.52 Acquired stenosis of external ear canal secondary to surgery
- 381.3 Other and unspecified chronic non-suppurative otitis media
- 381.10 – 381.19 Chronic sensory otitis media code range
- 381.20 – 381.29 Chronic mucoid otitis media code range
- 382.0 – 382.9 Chronic suppurative and unspecified chronic otitis media code range
- 389.00 – 389.08 Conductive hearing loss code range
- 744.03 Anomaly of middle ear, except ossicles

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Government Agency; Medical Society; and Other Authoritative Publications

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3. FDA 501k information available at: <http://www.fda.gov/cdrh/manual/510kprt1.html#premarket>. Accessed May 31, 2005.
4. Blue Cross and Blue Shield of Kansas Otolaryngology Liaison Committee consent ballot 12-08-05.

Web site

1. Entific Medical Systems with a U.S. office in Columbus, Ohio. Available at: www.entific.com. Accessed May 31, 2005.