COLORADO
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CHILDREN WITH
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DEAFBLINDNESS

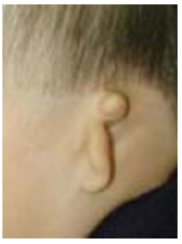
(303) 866-6681 or (303) 866-6605

Fact Sheet

Microtia

By: Jill Grattan

What is Microtia?
Microtia is a congenital condition in which the visible part of the ear is incompletely formed. Microtia can range from a bump of tissue in the place where the ear should be to a partially formed ear (e.g., the upper part of the ear is missing). Microtia may occur with or without artresia (the closing or absence of an ear canal). Many children who have microtia have a normally formed inner ear. In 90% of cases only one ear is affected (Children's Hospital Boston, n.d.)


Grade 3

What Causes Microtia?
At this time, the causes of microtia are unknown and are not related to the mother's actions during pregnancy. Microtia can be associated with genetic syndromes such as Treacher Collins syndrome, Hemifacial Microsomia, etc. In the majority of cases, microtia appears to occur for unknown reasons.

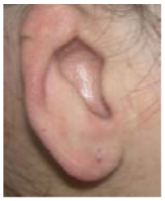
Is hearing affected with microtia?
Bonilla (2009) reports affected ears generally have a severe conductive hearing loss, approximately 40-60 dB.

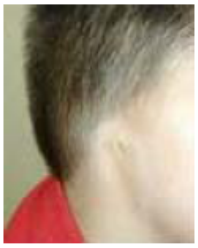
How is it classified?
Microtia is classified according to whether one or both ears are involved as well as the level of microtia:

Unilateral microtia – one ear is affected
Bilateral microtia – both ears are affected

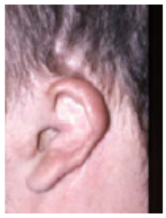
There are four levels of microtia:

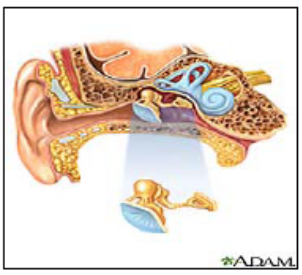
1. Grade 1 – the ear is smaller with an identifiable outer ear structure and external ear canal (i.e., the actual ear is well defined)
2. Grade 2 – the outer ear is partially formed and has a closed off external ear canal. Associated with hearing loss
3. Grade 3 – The outer ear is shaped like a peanut and the external ear canal and eardrums are absent.
4. Grade 4 – the outer ear is absent.


Grade 2


Grade 4

How is Microtia treated?
It is recommended that prior to six months of age children with microtia should be fitted with special types of hearing aids (e.g., bone conduction hearing aids). Reconstructive surgery, to rebuild the outer ear, is an option. Additionally, surgery to rebuild the ear canal and eardrum is an option; results of surgery depend on how much of the middle ear is present (Fearon & Johnson, 1993).


Grade 1



References

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Children's Hospital Boston (n.d.). *My child has…Microtia*. Retrieved December 28, 2010, from, http://www.childrenshospital.org/az/Site1298/mainpageS1298P0.html

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Microtia Picture retrieved December 23, 2010 from http://hubpages.com/hub/Microtia--What-It-Is-and-How-to-Deal-with-It Ear Image retrieved December 23, 2010, from http://www.nlm.nih.gov/medlineplus/eardisorders.html

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Fact Sheets from the Colorado Services to Children and Youth with Combined Vision and Hearing Loss Project are to be used by both families and professionals serving individuals with vision and hearing loss. The information applies to children, birth through 21 years of age. The purpose of the Fact Sheet is to give general information on a specific topic. More specific information for an individual student can be provided through personalized technical assistance available from the project. For more information call (303) 866-6681 or (303) 866-6605. Updated: 9/11