COLORADO
Assistance for those
SERVICES TO
with both vision
CHILDREN WITH
and hearing loss
DEAFBLINDNESS

Fact

Sheet

Microtia

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.)

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:

Grade 1

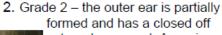
Unilateral microtia – one ear is affected

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)



external ear canal. Associated with hearing loss 3. Grade 3 – The

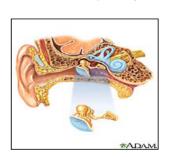
outer ear is shaped like a peanut and the external ear canal and eardrums are absent.

Grade 3 4. Grade 4 – the outer ear is absent.



How is Microtia treated?

It is recommended that prior to six Grade 4 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).



By: Jill Grattan



Grade 2

References

Bonilla, A. Emedicine from WebMD. (2009, June). *Microtia*. Retrieved December 28, 2010 from, http://emedicine.medscape.com/article/995953-overview

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

Microtia Picture retrieved December 23, 2010 from http://www.nlm.nih.gov/medlineplus/eardisorders.html

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For more information about the CO Services for Children and Youth with Combined Vision and Hearing Loss Project:

Colorado Department of Education

Phone Number: 303-866-6694 – Ask to speak with a Deaf-Blind Specialist on staff

Fax: 303-866-6918

Exceptional Student Leadership Unit Web Page Address:

1560 Broadway, Suite 1100, Denver, CO 80202 <u>www.cde.state.co.us/cdesped/SD-DB.asp</u>

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. The contents of this Fact Sheet were developed under a grant from the United States Department of Education (US DOE), #H326C080044. However, these contents do not necessarily represent the policy of the US DOE and you should not assume endorsement by the Federal Government. More specific information for an individual student can be provided through personalized technical assistance available from the project. Reviewed: 2/17