Anotia and Microtia

What are anotia and microtia?

Anotia occurs when there is a complete absence of the auricle (external ear, also called the pinna) and auditory canal. Microtia consists of malformation or hypoplasia (decreased growth) of the auricle. This malformation may range from a small, but otherwise normal, external ear to an external ear with major structural changes. The external auditory meatus (canal) may also be narrow or absent.

More than 80% of the cases of microtia or anotia are unilateral (only one ear is affected); the right side is more often affected than the left. Abnormalities of the inner ear are present in approximately 12 – 50% of cases. Preauricular (in front of the ear) skin tags may also be present.

What causes anotia and microtia?

Microtia and anotia occur when the tissues that form the auricle fail to develop during the first few weeks of pregnancy. Currently, the exact cause of anotia and microtia have not been identified. Certain medications may increase the risk of microtia/anotia when taken by the mother during pregnancy. Ask your doctor about any medications you take during pregnancy.

In approximately 65% of cases, microtia or anotia is an isolated condition (no other birth defects are present). Other birth defects which can be seen with microtia or anotia include the following:

- Facial clefts
- Cardiac (heart) defects
- Anophthalmia (absence of one or both eyes) or microphthalmia (small eyes)
- Esophageal atresia (narrowing of the esophagus, the tube between the mouth and stomach)
- Limb abnormalities
- Renal (kidney) defects
- Polydactyly (extra fingers or toes)
- Vertebral (spine) anomalies

If your child has anotia or microtia, your child’s doctor(s) will perform a thorough examination to identify any other birth defects which may be present.

For more information
Microtia-Congenital Ear Institute - [http://www.microtia.net/](http://www.microtia.net/)
The New York Eye & Ear Infirmary - [http://www.nyee.edu/faqlist.html?tablename=faq&key=60](http://www.nyee.edu/faqlist.html?tablename=faq&key=60)

Source: Texas Birth Defects Epidemiology & Surveillance, Texas Department of State Health Services