LISTEN FROM EAR TO EAR TIPS OF THE MONTH

October 1, 2011

Issue IV

NEWBORN HEARING SCREENING PROGRAM

Email:
DebbieE@health.ok.gov

GENETICS AND HEARING LOSS

DID YOU KNOW???

- 1 in 300 infants are born with mild to profound hearing loss
- 50% of congenital hearing loss are genetic
- Genetic hearing loss:
  5-10% syndromic
  90% non-syndromic
- Most inherited as autosomal recessive disorders
- 50% of these are thought to be due to **Connexin 26**
- 20-30% of all congenital loss is estimated to be due to **Connexin 26**
- 50 genes have been discovered for non-syndromic hearing loss
- 30 genes have been discovered for syn-dromic hearing loss

CONNEXIN 26 (Cx26)

What is it?

- Cx26 is a protein found on the gene (GJB2)
- Hearing loss occurs because of disruption in flow of potassium in the cochlea
- Genetically transmitted in a recessive manner
- Cx26 mutations are non-syndromic
- Degree of loss can be mild- profound
- Parents can be tested to see if they are carriers
- Infant or child with hearing loss can be tested for Cx26

SYNDROMIC HEARING LOSS

Dominant

- Warrdenburg
- Branchio-Oto-Renal
- Neurofibromatosis (NFII)
- Stickler
- Treacher-Collins

Recessive

- Usher
- Alport
- Jervell and Lange-Nielson
- Pendred

Less Common

- CHARGE
- Mitochondrial Condition

What Do Parents Need To Know about Genetics/Testing

Genetics is not just about families but it is also about the overall health of the child. Most children that have hearing loss do not have other health problems. Since a few do, genetic testing/counseling may help doctors find these problems. This information will help parents prepare the for their child's future health needs; therefore, it is important for the parents to get a referral to a genetics clinic to learn why their child has a hearing loss. There is about a **50% chance** their child's hearing loss is due to a genetic cause.

The genetics team helps determine if the child's hearing loss is progressive and the chances that future children will have hearing loss. The team will review the child's health records, medical conditions and the history of hearing loss in the family. The child may undergo tests for previous infections and tests for common genes that cause deafness.

Medicaid and other insurance plans may pay for testing in some states. Parents need to check their insurance plan to be sure. www.ACMG.net

EVENT OF THE MONTH

Oklahoma Speech-Language & Hearing Association

OSHA Conference
October 6th and 7th
Moore-Norman
Technology Center

TIP OF THE MONTH:

Can I perform OAE/ Tymp screening on child with PE tubes?

Yes!

- If there is no visible drainage or blockage
- Patent (Open) PE tubes will reveal large ear canal volumes
- If refers one or both tests, follow-up with PCP to check tubes