The Role of Midwives in Newborn Hearing Screening
November 14, 2011
What are we going to hear about?

- Importance of newborn hearing screening
- Methods of screening newborn hearing
- Protocol for follow-up for babies who don’t pass
- Genetic factors related to hearing loss
- Impact of hearing loss on language development
- Early intervention options
- Patient-education resources
What’s all the fuss about?

• It’s the law
• Most frequent birth defect
• Late detection has serious negative consequences
• Dramatic benefits with early identification
• Tremendous progress
• Room for more progress
What’s going on in there?

Anatomy of the Human Ear

- Ear canal
- Ear Drum
- Middle Ear Bones
- Vestibular Organs (Balance)
- Cochlea (Hearing)
- Nerve

Conductive Hearing Loss (Outer and Middle Ear)
Sensorineural Hearing Loss (Inner ear)
How is hearing screened?

**ABR**
- 10-20 minutes
- Uses headphones
- Sensors placed on body
- Measures brain’s response to sound
- Less impacted by fluid in ears
- Equipment more expensive
- Reimbursement rate higher
- Recommended method for preemies, NICU babies, and when there is a family history of hearing loss

**OAE**
- 5 minutes
- Uses probes in ears
- No sensors
- Measures cochlea’s response to sound
- Fluid in ears interferes
- Equipment less expensive
- Reimbursement rate lower
What if baby doesn’t pass?

– Results reported to state
– 2nd screening is needed
– Evaluation if fail 2nd screening
– Phone calls and letters from state office
– Follow-up until normal hearing or confirmed hearing loss
Who does hearing screenings?

– All birthing facilities
– Pediatric audiologists
  • CMS approved

– Some CMS Offices
  • Ft. Pierce
  • Tallahassee
  • Pensacola
  • Marathon
  • Orlando
  • Miami
  • Gainesville
  • Tampa
  • Naples
Can genes cause hearing loss?

• 50% due to genetics
• Many don’t have outward physical characteristics
• Often present when no one else in family has hearing loss
• A few associated syndromes:
  – Alport
  – Usher
  – Treacher Collins
  – Waardenburg
  – Pendred
• Nonsyndromic
  – Connexin 26
• Refer to geneticist before or after birth if parents have questions
Why such a rush?

Goals:
• Screen by 1 month
• Diagnose by 3 months
• Services by 6 months

Early speech and language skills are needed for success in school and life.
What can be done after a hearing loss is detected?

Early Steps

• Serves birth-three
• Funds for services and technology that insurance companies deny
• Speech Therapists and Hearing Specialists available
• Services provided in natural environment
• No income eligibility requirement
• Services for other developmental conditions
• Call 1-800-654-4440 to refer
How can I spread the word?

Publications

- **Newborn Screening-An Important Beginning brochures**
- **You Baby Needs another Hearing Test brochures**
- **Hearing Milestone magnets**

Websites:

- [http://www.doh.state.fl.us/cms/nbscreen-hearing.html](http://www.doh.state.fl.us/cms/nbscreen-hearing.html)
- [www.infanthearing.org](http://www.infanthearing.org)
- [www.cdc.gov/ncbddd/ehdi](http://www.cdc.gov/ncbddd/ehdi)
Who do I contact for more training or questions?

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