NewbornHearingScreening

About one in 500 infants are born with a hearing loss which is difficult to detect without specialized testing. Timely diagnosis of hearing loss is important in order to provide necessary intervention for the baby and support for the family early on. Without early intervention, sometimes years may pass until the problem is discovered.

Children with hearing loss have difficulty communicating and learning: hearing loss affects academic progress, and psychosocial development. The effects of hearing loss may be reversed if diagnosis, intervention, and support are provided from the first months of life. Recent research shows that when babies are diagnosed with hearing loss and receive quality services early, they have the best prognosis for developing language and speech at the same rate as children with normal hearing.

All infants are screened for hearing loss. Most newborns with hearing loss have no indication, family history, or other obvious risk factors.

The test is administered while the infant is sleeping. A soft probe is inserted in the baby's ear; it emits soft sounds. A normal ear will respond to these sounds by producing its own soft sounds (Otoacoustic Emissions-OAEs), which can be recorded with the help of specialized equipment. Depending on the recording, the baby may pass the screening or may need to be re-tested. This is the Automatic OAE screening.

When there is no satisfactory recording of OAEs in one or both ears, then

the baby is tested with Automatic Auditory Brainstem Response audiometry-AABR. This test records the brain's response to sounds. A soft probe is inserted in the baby's ear, emitting soft sounds. The sound vibration travels through the hearing mechanism to the cochlea, where it is transformed to an electric signal. This electric signal travels through several neural centers to stimulate the auditory brain. The equipment records the electric signal when hearing is normal. If there is no satisfactory recording, the infant is referred to an

audiologist in order to have a detailed diagnostic evaluation, which will provide more information on the status of hearing. These tests are presented in the leaflet "My child has hearing loss", along with information for parents of infants with hearing loss.

