Screening of hearing in delayed speech development by auditory brain stem response (A useful sorting test)

Awad Al-Serhani, MD, Mohammad Kabiraj, MD, Hamad Al-Muhaimeid, MD, Abdulrahman Al-Essa, MD, Seraj Zakzouk, FRCS.

ABSTRACT
Objective: To study the role of auditory brain stem response (ABR) in sorting children with delayed speech development (DSD) according to their hearing threshold (HT). Further steps in evaluation or management could be followed accordingly. Materials: A retrospective analysis of ABR results in 130 children with DSD. Age ranged between 16 months and 6 years (mean age 4.6). They were referred from Riyadh area and other provinces for estimation of hearing level by ABR as part of their evaluation. Results: Three groups were identified: i. Thirty seven children (28.8%) had adequate HT to develop normal speech (27 had normal HT and 10 had only unilateral affection), ii. Twenty five children (19.2%) had mild hearing loss (19 had sensorineural type and 6 conductive type), iii. Sixty eight children (52.3%) had severe hearing loss (39 children) and profound hearing loss (29 children). Conclusion: ABR is a useful test in sorting patients with DSD to fit them in the suitable program of evaluation or rehabilitation. Public education as well as medical and paramedical awareness of the problem may prevent such late presentation. Management of these children in multidisciplinary centers throughout the main provinces will be more ideal and yielding.

Saudi Medical Journal 1997; Vol. 18 (6): 551-553

Keywords: ABR, delayed speech development, screening of hearing.
References