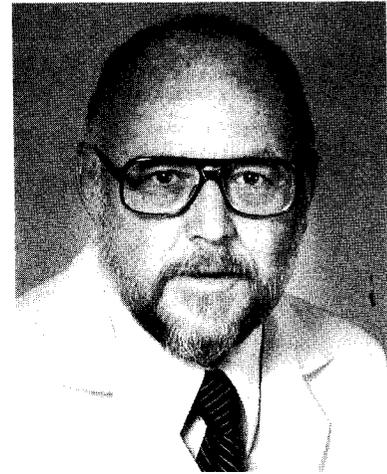


Editorial

Identifying Hearing Loss in Newborn Babies



"Screening" for hearing loss, in the epidemiological sense, is a straightforward concept. Administer to each baby a brief and efficient test which is either passed or failed. Dismiss those who pass the screen and reschedule those who failed the screen for a complete diagnostic evaluation. Consider a baby hearing impaired only if he/she is so identified by the diagnostic study. Within this frame of reference one can settle into the familiar issues of sensitivity, specificity, and efficiency.

In this issue of *JAAA*, however, Robert Galambos, Mary Jo Wilson, and Patricia Silva ("Identifying Hearing Loss in the Intensive Care Nursery: a 20-Year Summary") ask us to consider a somewhat different approach. Based on their 20-year study of ABR testing of neonatal intensive-care nursery (ICN) graduates in the hospitals of San Diego they challenge some of the conventional screening concepts so familiar to us. They note, for example, that, in the San Diego experience, the major problems preventing the fitting of hearing aids to the babies who needed them centered on either 1) failure to bring tester and baby together in the ICU, usually because of a short window of opportunity, or 2) failure of parent to bring back, for retest, the baby who failed. In their experience these logistical factors far outweighed the oft-cited issue of testing time. For these and other reasons they argue that, if a baby does not give an ABR response at the "screening" criterion (e.g., 30 dB nHL), then it makes sense to just go ahead and establish the ABR threshold then and there rather than scheduling a follow-up at which the baby may or may not appear. In fact, in the San Diego experience the likelihood that the baby would appear was only 50%.

While the authors' experience was confined to high-risk babies in the ICN their observations may have important implications for the concept of universal screening for hearing loss. In universal screening, of course, the yield will be far less than in the ICN. Only 1 or 2 babies in 1000 are expected to have severe or profound loss. It is as important, therefore, to rule out the 998—999 normal babies quickly and efficiently as it is to identify the 1–2 hearing-impaired babies. Hence the recommendation of the recent NIH Consensus Panel for a two-stage procedure in which babies are first screened by otoacoustic emissions. Only those who fail the emissions screen go on to the second-stage, ABR test. It is at this second stage that the observations of Galambos et al apply. After going to all the trouble of affixing electrodes for the ABR screen, why not just go ahead and run an intensity series on each ear? The cost, in additional testing time, might be far less than the cost of losing half of the identified children to follow up and/or the cost of subsequent follow-up diagnostic evaluation.

Readers with an interest in the presently volatile issue of universal screening for hearing loss are urged to consider the lessons learned by Bob Galambos and his colleagues in their pioneering 20-year study.

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