Clinicians have stressed, for many years, that it takes most clients a period of time to adjust to an amplification device. Thus, performance at the initial fitting may not reflect optimal fitting parameters weeks or months later. But the challenge has always been how to know what changes will occur after a period of use with the device. In this issue of JAAA, two papers present new and innovative approaches to this persistent problem.

In the paper “Hearing Aids for Ménière’s Syndrome: Implications of Hearing Fluctuation,” antipodean authors Celene McNeill, Catherine M. McMahon, Philip Newall, and Mary Kalantzis, of Australia, studied a method for solving the problems in hearing aid fitting imposed by the fluctuation in hearing sensitivity so characteristic of persons with Ménière’s syndrome. They fitted, to each of 40 participants, a commercially available aid that was supplemented by a portable programmer system. This combination of devices allowed individuals to plot an audiogram at any time and to reprogram the aid to take into account any changes in sensitivity. Eight participants were instructed to test their hearing three times a day over a period of eight weeks. The experiment was quite successful. All participants recorded substantial fluctuations in their audiograms over the eight-week observation period, but by reprogramming their aids, most were able to cope fairly well with the shifts in sensitivity over time.

Cochlear implants present a similar problem: how to determine the ultimate optimal signal-processing strategy. In the paper “A Daily Alternating Method for Comparing Different Signal-Processing Strategies in Hearing Aids and in Cochlear Implants,” authors Richard S. Tyler, Shelley A. Witt, Camille C. Dunn, and Ann E. Perreau of the University of Iowa addressed the problem by instructing participants who had been newly fitted with a cochlear implant to alternate between two signal-processing strategies on a daily basis and to keep a log of their reactions to the two settings. In addition they were tested with a variety of formal speech understanding and localization tests both at the initial fitting and two to three months later. Results were encouraging. Some individuals were able to determine which of the two strategies was best for them at the initial fitting, but others needed more than three months to decide. The authors concluded that audiologists must remain flexible in programming channel and rate parameters and must recognize that some individuals may take weeks or months to settle on the optimal processing strategy.

The authors of both papers suggest that their experimental protocols might serve as useful clinical procedures for evaluating how preferences may or may not change over time. Indeed, both papers are excellent examples of how research findings can often find immediate applications in our daily clinical work.

James Jerger
Editor-in-Chief

Visit JAAA online at http://www.audiology.org/publications/jaaa