Myringotomy Tubes Work With Cochlear Implant

BY MARY ANN MOON

FROM THE ARCHIVES OF OTOLARYNGOLOGY AND HEAD AND NECK SURGERY

Myringotomy tubes can be placed before, during, or after cochlear implants are placed, without putting the patient or the success of the cochlear device at undue risk, according to a study of 62 children.

Moreover, the presence of myringotomy tubes might actually protect the implanted ear if it is still susceptible to recurrent acute otitis media, thus sparing the patient from additional procedures, said Dr. Christopher F. Barañano and his associates at the University of Alabama at Birmingham.

The investigators performed what they described as the first independent study to analyze the overall management of pediatric ears that have both myringotomy tubes and cochlear implants (CIs), during the entire course of implant candidacy, placement, and follow-up.

The role of myringotomy tubes in CI is controversial. Fearing that the tubes raise the risk of complications, "some surgeons strive to avoid myringotomy tubes and to establish tympanic membrane integrity before proceeding with CI, while others treat recurrent acute otitis media with myringotomy tubes before [implantation] despite CI candidacy," they noted.

Dr. Barañano and his colleagues reviewed the records of 189 CI cases treated at their hospital between 1998 and 2008. They found 62 children (78 ears) with ipsilateral myringotomy tubes. The mean patient age was 3.2 years, and mean follow-up was 58 months.

In 32 ears, the tubes were spontaneously extruded, and in another 14 the tubes were removed before CI was undertaken. Tubes were left intact in the remaining 32 ears at the time of CI.

The researchers found that in 11 ears in which a myringotomy tube had been extruded or removed before CI, the placement of new tubes was soon required to manage recurrent otitis. In addition, in three ears in which myringotomy tubes had been removed before CI, severe otitis with mastoiditis developed within several months. New tubes were inserted, and no further sequelae developed, they said (Arch. Otolaryngol. Head Neck Surg. 2010;136:557-60).

In all, 26 patients developed otorrhea, which resolved with standard outpatient medical therapies. Four patients had perforation of the tympanic membrane.

This low rate of complications "made us realize that we could handle these patients like our other patients with recurrent acute otitis media," Dr. Barañano and his associates wrote. ■

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have leukocytosis, an elevated C-reactive protein or erythrocyte sedimentation rate, or other systemic symptoms.

Dr. Amir and his coinvestigators decided to conduct a systematic study of observational management after making two key observations: Children whose parents eschewed more aggressive interventions in favor of natural healing eventually seemed to experience total resolution, and kids who underwent total surgical excision of their infected node often returned several months later with another infected lymph node, necessitating another round of treatment.

Dr. Amir noted that the observation-only approach represents outside-the-box thinking for otolaryngologists. A recent survey of 200 American pediatric otolaryngologists showed that 59% managed children with nontuberculous mycobacterial lymphadenitis using surgical excision plus adjunctive antibiotics, 24% resorted to surgical excision alone, and 17% used antibiotics without surgery. Most remarkably, in his view, 59% of the time the pediatric otolaryngologists treated children based only on the clinical picture, without identifying an etiologic organism (Int. J. Pediatr. Otorhinolaryngol. 2010;74:343-6). ■

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