

Second step: The layers of the tympanic membrane can be dissected and seen.

Third step: Content of the middle ear studied after elevating the tympanic membrane.

Fourth step: Cochlear dissection and internal auditory canal dissection.

Fifth step: Skull-based dissection.

**Clinical significance** Same steps can be followed in operative procedure also, provided keeping in mind the facial nerve anatomy.

**Result** In cadaver dissection, this is the easiest procedure other than the conventional post auricular dissection which needs drilling of the mastoid.

#### A0015: End to Mastoid Cavity Problems

Paramita Saha

**Aim** Aim of cholesteatoma surgery is to obtain a safe, dry, and self-cleaning ear. Several methods have been tried and tested to achieve this goal with varying degrees of success.

**Materials and Methods** Study of 70 case series over the 4-year time has been made using different methods and materials to obliterate and reconstruct the mastoid cavity and the results compared.

**Results** Current trends appear to favor a combination of mastoid obliteration and reconstructive techniques with biologic materials, such as muscle flaps and bone chips, preferred over nonbiologic materials, such as hydroxyapatite crystals and ceramic. However, there is a large variation among the type of biologic flap used which can vary between fascia, muscle, and periosteum. After an extensive review, there is no ideal method for mastoid obliteration and reconstruction, as most methods appear to have a certain degree of success.

**Conclusion** The basic principles of a low facial ridge, large meatoplasty and an oval mastoid cavity should be adhered to, and the surgeon should choose a method that he or she is comfortable with.

#### A0016: To Evaluate the Postoperative Outcomes of the Endoscopic Stapes Surgery Performed in a Single Tertiary Care Center

Pradeep Pradhan

**Objective** To evaluate the postoperative outcomes of the endoscopic stapes surgery performed in a single tertiary care center.

**Materials and Methods** Retrospective case series contained 32 ears of stapedial otosclerosis, conducted in the department of ENT and Head-Neck Surgery, AIIMS, Bhubaneswar, from May 2016 to December 2017. All the patients had undergone endoscopic stapes surgery for otosclerosis using the standard endoscopic approach. Lobular fat had been utilized for plugging of the stapedotomy hole in all the cases. Anatomical functional outcomes were analyzed after 1, 4, and 6 weeks in the postoperative period.

**Results** Twenty-six patients were included (90% women) with a median age of 32.6 years (range, 23–49

years). The median follow-up was 5.3 months (range, 3–12 months). The chorda tympani nerve was sacrificed in 8.4% cases. Postoperative disequilibrium was detected in 7.0% cases and 100% resolution at first follow-up. The median air-bone gap (ABG) improved from 30.3 dB preoperatively to 9.35 dB postoperatively at last follow-up ( $p < 0.0001$ ). The ABG closed to less than 15dB in 89.3% of patients and less than 10 dB in 79%. There were no instances of postoperative sensorineural hearing loss (defined as  $> 15$  dB change from baseline) or facial nerve injury. Postoperatively, 29.6% of patients reported dysgeusia, of which 8.3% were persistent at last follow-up.

**Conclusion** Endoscopic stapedotomy is an effective technique to manage stapes fixation resulting in a median postoperative ABG of 9.35 dB and ABG closure to within 10dB in 79% of patients. Autologous lobular fat can be effectively used in controlling the disequilibrium in the immediate postoperative period.

#### A0017: Postoperative Outcome of Elective Mastoid Surgery: Pediatric versus Adult Patients

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**Aim** Analysis of postoperative outcome in elective mastoid surgeries in pediatric versus adult patients in terms of safe and dry ear, hearing restoration, cavity problems, and quality of life.

**Materials and Methods** In this cross-sectional study, all patients who underwent elective mastoid (primary and revision) surgery between 2011 and 2016 in a tertiary care hospital were recruited.

**Results** Forty-one pediatric and 59 adult postmastoidectomy patients were recruited. The mean duration of follow-up from the date of surgeries was 20 months in pediatric and 40 months in adult patients. 92.7% of pediatric and 96.6% of adult patients had safe ear at the time of evaluation. Seventy-three percent of pediatric and 80% of adult patients had dry ear and presence of granulation tissue was the most common cause for otorrhea in both the groups. Hearing improved by a mean of 16 dB in 63% of 27 pediatric patients and by 14 dB in 43% of 42 adult patients who underwent same stage tympanoplasty. Pediatric patients had a statistically significant better hearing outcome with major columella tympanoplasty as compared with adult patients. Also, 19.5% of pediatric and 40% of adult patients complained of tinnitus.

**Conclusion** Majority of pediatric patients with poor quality of life had otorrhea as compared with hearing impairment in adults. The incidence of high-facial ridge and sump effect was higher in pediatric patients. Pediatric patients had a better hearing outcome with major columella tympanoplasty than adult patients.

**Clinical Significance** Apart from complete disease clearance and tympanoplasty, adequate lowering of facial ridge, reducing the mastoid cavity size, and ensuring complete epithelialization of cavity in the postoperative period will improve the quality of life in pediatric patients undergoing mastoidectomy.