related to awareness, training of professionals and the deterrents for developing a hearing implant technology such as BAHA in a developing country such as India.

Introduction: The introduction of hearing implants in the Indian subcontinent started around the late 1980s in Mumbai. Many cochlear implant (CI) companies worked towards establishing comprehensive CI centres in India in the 90s and to date, more than 120 CI centres are established in the subcontinent offering hearing implants to its patients. While CI work has made good strides across the country (nearly 30,000 implants in 25 years is the estimate), other surgically implantable hearing devices including the BAHA have taken time to find application.

Material and Methods: The databases of all CI centres in India that offer BAHA to their patients were reviewed retrospectively. The general databases that were maintained by mentor surgeons that supported BAHA surgeries across the continent were referred to. CI and BAHA surgeons were interviewed regarding candidacy awareness, surgery, postoperative issues and any cost related deterrents.

Results: Of the 120 centres offering cochlear implants to patients, only about 40 have performed BAHA (Cochlear BAHA) surgeries in the past decade with or without mentor surgeons. A total of 248 BAHA implants have been performed including about 26 BAHA Attract surgeries. About 30 children are using BAHA processors on soft bands awaiting BAHA surgery (when they are five years of age). Fixture failures in the paedistric population is about 6% while wound related skin/soft tissue reactions have occured in 20% of patients (Holger grades 1 and 2) and 8% of patients (Holger grades 3 and 4). Longer abutments have been used to address some of the soft tissue hypertrophy issues in about 8 patients. The conventional technique of skin graft and generous soft tissue reductions (about 60% of the cohort) saw more soft tissue issues compared to the linear incision and minimal soft tissue reduction technique. Personal hygiene issues, tropical climate and scarring properties are perhaps some reasons for a higher rate of soft tissue reactions. More recently, with the advent of the transcutaneous BAHA 4 Attract systems, there have been no healing related issues thus far (26 patients).

Discussion: The impact of partial deafness that would make the majority of candidacy for BAHA is much less compared to profound deafness (bilateral). Awareness regarding bone conduction implants (BCI) despite a number of educational activities across the country leaves a lot to be desired amongst not just the potential candidates (and parents) but also hearing healthcare professionals. Many families of children that are candidates (bilateral microtia, for example) from the semiurban and rural population, are unwilling to go the extra mile to collect the funding for what is perceived as a minor handicap. Cost is most definitely a deterrent and there are no Government schemes that have included BAHA in their coverage list of devices, while there are atleast eight states in the country that have a state funded cochlear implant programme. With increasing awareness, reductions in the costs and the development of the transcutaneous bone conduction devices, it is envisaged that this form of surgical hearing re/habilitation would have a better acceptance and penetration in the subcontinent in the years to come.

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Difficult Situations in Cholesteatoma Surgery (N713)

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Facial Nerve in Cholesteatoma Surgery- Handling damage and avoiding injury

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Learning Objectives: To help the evolving surgeon to handle the facial nerve with confidence in extensive cholesteatoma, tips to preserve function and methods of handling injury.

Introduction: The facial nerve passes through the middle ear in its bony canal that is sometimes eroded in cholesteatoma, exposing the nerve trunk to injury during instrumentation. There are a few surgical tips to avoid injury and to repair after injury has happened.

Methods: In MESIARC, a tertiary otologic center, various cases of facial nerve palsy secondary to cholesteatoma , or attempted cholesteatoma surgery are handled. By careful understanding of anatomy,use of good magnification, proper instrumentation and meticulous care, we have been able to preserve facial nerve in most of the cases where it has been affected by disease or surgery. In rare cases where this could not be done, a variety of techniques have been used to correct the cosmetic effect of facial paralysis

Results: We have had 18 cases of facial nerve palsy secondary to cholesteatoma extension, six cases of surgical damage to the facial nerve during cholesteatoma surgery. Most of the cases of primary facial palsy due to disease were decompressed with near total recovery of function. Of the post surgical injury, two were managed with cable grafting, one with cross facial anastamosis, one with temporalis swing and the rest were decompressed with reasonable return to function.

Conclusions: A structured approach to the facial nerve helped with radiologic planning is of paramount importance in preservation of facial nerve function after injury either due to disease or previous surgery. A variety of techniques must be available in our armamentarium as no two patients are the same.

Learning Objectives: This presentation gives important tips to assess the facial nerve from a three dimensional view point, study of radiology of the facial nerve and the array of techniques at our disposal for preservation and repair.