

check up system was also useful to detect congenital cholesteatoma in Japan.

We present the recent congenital cholesteatoma cases in our hospital and describe the check up system for hearing from newborns to infant in Japan.

*Study design:* retrospective chart analysis of consecutive patients with congenital cholesteatoma.

*Patients:* Between September 2004 and August 2015 conclusive 47 patients underwent primary procedure.

*Intervention:* The diagnosis of congenital cholesteatoma with Potsic staging system and the therapeutic operation were performed.

*Main outcome measures:* The chance of detecting the congenital cholesteatoma, the patient age, the stage of the disease, the pathology of the ossicles and the hearing result of the surgery were studied.

*Results:* Twenty two percent of the patients belonged to the Stage I and II without ossicular involvement. They showed normal hearing. Eighty eight percent of the patients belonged to the Stage III or IV and 76% of the patients showed good hearing result postoperatively. Thirty percent of the patients had diagnosed by the hearing check up and 32 % of the patients had found accidentally with microscopic examination at the ENT office.

doi:10.1017/S0022215116001468

## Epidemiology aspects of CSOM (R616)

### ID: 616.2

#### Condition of the contralateral ear in patients with cholesteatoma

Presenting Author: **Alma Maniu**

Alma Maniu<sup>1</sup>, Violeta Necula<sup>2</sup>, Marcel Cosgarea<sup>2</sup>

<sup>1</sup>Iuliu Hațieganu University of Medicine and Pharmacy, <sup>2</sup>Otorhinolaryngology Department, Iuliu Hațieganu University of Medicine and Pharmacy, Cluj-Napoca, Romania

*Learning Objectives:* 1. Anatomical variants of tympanic compartments and their aeration patterns are one of the relevant pathogenetic factors involved in type of cholesteatoma occurrence. 2. The isthmus blockage theory could be a condition for the epitympanic type while tubal dysfunction is mandatory for mesotympanic type of cholesteatoma since the contralateral ear abnormalities are more frequent in the last one.

*Introduction:* In the recent years the incidence of chronic otitis media with cholesteatoma has decreased but remain a major challenge for surgeons due to the destructive characteristic of the disease. Although the pathophysiology of the acquired cholesteatoma remains to be clearly elucidated, it is presumed to be multifactorial, as many theories have been proposed and investigated. Anatomical variants of tympanic compartments and their aeration patterns are one of the contributing factors. Retraction pocket theory is the

most widely accepted but the contralateral ear in patients with cholesteatoma is less studied. The purpose of this study was to evaluate the contralateral ear in patients with cholesteatoma and to determine whether the characteristics of it differ according cholesteatoma growth patterns.

*Methods:* The charts of 924 operations for cholesteatoma performed from January 2000 to December 2013 at the Department of Otorhinolaryngology-Head and Neck Surgery, Iuliu Hațieganu University of Medicine and Pharmacy, Cluj-Napoca were analyzed retrospectively. Otomicroscopy was performed on both the affected and the contralateral ear. Cholesteatoma extension was noted during surgery.

*Results:* The age average for patients included in the study was of  $41 \pm 6.5$  years (95%CI [39.32–42.85]). The frequency of significant changes in the contralateral ear was 49.2 %. 6.5% of patients presented with bilateral cholesteatoma. Other abnormalities were retraction pockets (32%), perforations of the tympanic membrane (25%), serous otitis media (5%). Contralateral ear modifications were more frequent in the posterior mesotympanic type of cholesteatoma cases.

*Conclusions:* Lower damage of contralateral ear in posterior epitympanic type of cholesteatoma supports the isthmus blockage theory for epitympanic cholesteatoma occurrence. Long-term follow-up of the condition of contralateral ear in cholesteatoma patients is mandatory for early intervention in order to prevent progression of the disease.

doi:10.1017/S002221511600147X

## Epidemiology aspects of CSOM (R616)

### ID: 616.3

#### Similarities and Differences in the Diagnosis and Treatment of Necrotizing Otitis Externa and Diabetic Foot Osteomyelitis

Presenting Author: **Daniel Kaplan**

Daniel Kaplan, Chilaf Peled  
Soroka University Medical Center

*Learning Objectives:* Understand the similarities and differences between DFO and NOE

*Background:* Necrotizing otitis externa (NOE) is a severe inflammatory process effecting both soft tissue and bone. This disease is strongly associated with diabetic patients and, to a lesser extent, immunocompromised conditions. Diabetic patients are also at risk for the development of diabetic foot osteomyelitis (DFO), another inflammatory condition effecting soft tissue and bone.

*Objective:* compare NOE with DFO.

*Methods:* clinical review.

*Results:* Patient's characteristics and co-morbidities are similar in both entities. Similar to NOE, Pseudomonas A. is associated with DFO, particularly in warm climates. Unlike NOE, there is no role for superficial swab cultures in DFO and deep bone biopsies are recommended for the