well as review those technical factors that are critical for successful outcomes.

**Methods**: Patients (n = 240) that underwent subtotal petrosectomy with closure of the external auditory canal and obliteration of the cavity with abdominal fat for various presentations of cholesteatoma were analyzed.

**Results**: The most frequent indication for subtotal petrosectomy was in recurrent disease, previous radical cavities, in petrous bone cholesteatomas and in meningoencephalic herniations. Recurrence of cholesteatoma was seen in only 4 (1.7%) cases. Other minor postoperative complications like wound dehiscence and infection of fat in the cavity etc occurred in 13 patients (11.83%).

**Conclusions**: Subtotal petrosectomy permits obtaining a cavity isolated from the external environment, and when needed, it improves the access and visibility during the surgical procedure. Subtotal petrosectomy is a safe technique, with a low rate of complications.

doi:10.1017/S0022215116001390

**How do we approach cholesteatoma (N613)**

**ID: 613.4**

**Tips and tricks in Open Tympanoplasties**

Presenting Author: **Enrico Piccirillo**

Enrico Piccirillo, Melissa Laus, Annalisa Giannuzzi, Mario Sanna

Gruppo Otologico

**Learning Objectives**: To evaluate the outcomes of open tympanoplasties (canal wall down mastoidectomies) for cholesteatomas.

**Study Design**: Retrospective study.

**Setting**: Gruppo Otologico, a quaternary referral center for Otology and Skull Base Surgery in Italy.

**Methods**: 1324 cases with a minimum of 2-years follow-up that were operated for middle ear and mastoid cholesteatoma using the open technique were included in the study. The outcomes of were analyzed and the results were compared with a literature review.

**Results**: The mean follow up was 46.43 months. The mean pre-operative air bone gap was 37 ± 7 dB. Simultaneous ossicular reconstruction was performed in 32% of the cases. A second stage reconstruction was performed in 42% of the cases. Recurrent cholesteatomas were seen in 6% of cases in our series. 1% patients developed stenosis of the meatooplasty. Postoperative ear discharge was observed in 4% cases.

**Conclusion**: The open (canal wall down) technique is a tried and tested procedure in recurrent and large cholesteatoma with considerable pre-operative hearing loss.

doi:10.1017/S0022215116001407

**Evidence based practice in Cholesteatoma Surgery (R614)**

**ID: 614.2**

**Canal wall up versus canal wall down mastoidectomy for acquired cholesteatoma; a systematic review on disease recurrence rates**

Presenting Author: **Jef Mulder**

Jef Mulder1, Franco Abes2, Casper Tax1

1Radboud University Medical Center, 2University of Santo Tomas Hospital, Manilla, Philippines

**Learning Objectives**: The aim of this study is to compare the proportion of disease recurrences in patients with acquired cholesteatoma, 5 years after Canal Wall Up or Canal Wall Down mastoidectomy.

**Introduction**: Cholesteatoma is a destructive ear disease. Therapy consists of surgical removal by mainly the canal