#### ABSTRACTS

concha mastoid tympanoplasty 18 cases, add apare keratoplasty, small tympanic cavity forming technique.

#### 2 the results

This group of patients after 1 year to 3 years back, the close typekeep plane wall of mastoid tympanoplasty 102 cases, hearing had no obvious change in 62 cases (51%); , people with hearing improve 13 cases (11%), apparent decline in hearing in 2 cases, accounting for 1%. Hearing a reformer, 41 cases hearing improve 29 cases, accounted for 70.73%, hearing no change of 12 cases, accounted for 29.26%, open - removed concha mastoid tympanoplasty 18 cases, hearing had no obvious changes in 4 cases (22.2%); The improvement in 1 case, 5.6%, the hearing in 13 cases, accounting for 72.2%.

### 3 discuss

Decided to operation method, according to the scope of the lesions in patients with closed type - keep plane wall of mastoid tympanic cavity forming and open - removed concha mastoid tympanic cavity forming each have advantages and disadvantages. Don't repeat here.

Again is eustachian tube dysfunction, eustachian tube and middle ear cavity infection causal, intraoperative careful cleaning lesions, strengthening postoperative follow-up, curative effect is exact middle ear surgery.

doi:10.1017/S0022215116001985

### Free Papers (F642)

### ID: 642.6

## Studies by Nature of "Eustachian Tube Dysfunction": A Preliminary Report

# Presenting Author: Udi Cinamon

Udi Cinamon<sup>1</sup>, Hussein Amer<sup>2</sup>, Avraham Lazary<sup>2</sup>, Dov Albukrek<sup>2</sup>, Tal Marom<sup>3</sup> <sup>1</sup>Wolfson Medical Center, <sup>2</sup>Reuth Medical and Rehabilitation Center, Tel Aviv, Israel, <sup>3</sup>Department of Otolaryngology, Head and Neck Surgery, Assaf Harofe Medical Center, Zerifin, Israel

*Learning Objectives*: Challenge the concept of Eustachian tube dysfunction. A study of the middle ear in unconscious, tracheotomized patients with severe brain damage who were unable to swallow, i.e., severely diminished ability to actively open the ET. Therapeutically Thoughts.

*Background and Objective*: The Eustachian tube (ET) is a conduit communicating the middle ear (ME) with the nasopharynx. The ET is usually passively collapsed, whereas its opening is an active process. The intermittent, transient ET opening is accepted as critical for maintaining ME pressure circa ambient pressure, i.e., keeping the normal ME function. Interference of fluid passage through the ET was termed "ET dysfunction", implying the pathophysiology of chronic ME diseases, such as otitis media with effusion (OME), tympanic membrane atelectasis or development of cholesteatoma. Our objective was to study a unique group of patients with severely diminished ability to actively open the ET.

Patients and Methods: Unconscious, tracheotomized patients with severe brain damage who were unable to swallow, produce valsalva or yawn, and fed by gastric tubes were enrolled after obtaining an informed consent from the authorized guardian(s). Each patient underwent otoscopic examination, tympanometry, nasopharyngoscopy and evaluation of gag reflex and soft palate movement. Some patients underwent fiberoptic endoscopic evaluation of swallowing with sensory testing (FEESST).

*Results*: Of the 14 patients recruited, 11 were eligible and fully evaluated: nine males and 2 females, aged 18–79 years (average 53). The period of tube feeding and mechanical ventilation was 3–84 months (average 28). None had prior known or recorded otogenic illness. All patients lacked a gag reflex or palatal movement. Otoscopy of 22 ears revealed 10 with OME (45%, 5 patients) and 12 normal ears (55%, 6 patients). Tympanometry type B was documented in 11 ears, type As in 3 and A in 8.

*Conclusion*: Despite that all ears tested apparently had a dysfunctional ET, about half had a normal ME. This strongly reveals that the ET is an important but not the only factor maintaining and regulating ME pressure.

doi:10.1017/S0022215116001997

### Chronic otitis media in indigenous (N643)

#### ID: 643.1

## Australian Aboriginal & Torres Strait Islander Chronic Ear Disease

Presenting Author: Francis Lannigan

Francis Lannigan The University of Western Australia

Learning Objectives: Australia's Indigenous population has the highest rate of chronic ear disease of any Indigenous people on the planet. The World Health Organisation recognises any population with a rate of chronic ear disease greater than 4% to have a public health crisis. In remote Aboriginal & Torres Strait Islander Communities the incidence of chronic ear disease can be as high as 70%. Affected children usually have their initial suppurative infection with otorrhoea in the first six weeks of life. The impact of associated hearing loss at critical times of language development and early education has life-long individual and community adverse outcomes. The 'tyranny of distance' is not a significant causative factor (although it is very significant with respect to service provision), as there is a similarly high rate of disease in urban Aboriginal communities.

The disease pattern is predominantly tubo-tympanic; however, cholesteatoma does occur. Unfortunately, in this population, cholesteatoma often presents with a complication or as an incidental finding during reconstructive surgery. Outcomes are generally worse than those reported in non-Aboriginal populations. The poorer outcomes are considered to be multi-factorial in origin.

This presentation will explore the otologist's role in helping to manage the burden of this disease. It will describe the Ear Health Teams and how they function in Western Australia. It will also discuss how telemedicine has influenced management.