

**Conclusion:** Our results indicate that ossiculoplasty provide stable and excellent hearing improvement in patients with otitis media with or without cholesteatoma. Results with PORP was better than those with TORP. Several influential factors affected the outcomes of ossiculoplasty.

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## Complications in Chronic ear surgery (R746)

**ID: 746.1**

### Management of large tegmen defects and meningoencephalic herniation following Cholesteatoma surgery

Presenting Author: **Mohamed Badr-El-Dine**

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*Learning Objectives:*

**Objective:** The purpose of this presentation is to highlight the importance of tegmen defects that may result following cholesteatoma and mastoid surgery and emphasize the technical details for their reconstruction.

**Introduction:** Despite marked decline in the incidence of complications of CSOM, life-threatening complications still exist. The presence of thinning or dehiscence of the tegmen tympani or mastoidium is fairly common in CSOM especially after mastoidectomy, but only small portion of patients will demonstrate meningo/encephaloceles and CSF leakage.

**Objective:** The purpose of this presentation is to highlight the importance of tegmen defects that may result following cholesteatoma and mastoid surgery and emphasize the technical details for their reconstruction.

**Methods:** Fourteen patients operated for surgical repair of tegmen defects associated with different degrees of meningoencephalic herniation. Surgical approaches: 1) transmastoid; 2) middle cranial fossa; and 3) combination of both approaches. The choice of approach depends on size and site of the defect, hearing level, and surgeon experience. Small tegmen defects can be managed efficiently through the mastoid approach, while large defects require combined MCF and mastoidectomy. Following extradural dissection and encephalocele reduction or resection, we use a multilayer closure for direct repair of the dural and bony cranial base defects. Concave calvarial bone cut from the temporal craniotomy flap provides excellent material for reconstruction without any impingement on ossicular chain.

**Results:** All patients underwent surgical reconstruction of their tegmen defects without significant intraoperative or postoperative complications. All patients exhibited normal facial function postoperatively. None of our cases required lumbar drain placement.

**Conclusion:** Combined MCF and mastoidectomy approach proved effective to repair tegmen and dural defects. Surgical

repair prevents progression and meningitis. Advantages of this technique are the control of the floor of the MCF and reconstruct large-size bony defects even those located anteriorly without disrupting the ossicular chain.

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## Complications in Chronic ear surgery (R746)

**ID: 746.2**

### Labyrinthine fistulas management in chronic middle ear surgery

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Manuel Jesús Manrique Rodriguez

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*Learning Objectives:* Summary abstract presentation in the conference: "Complications in chronic ear surgery".

One possible complication during cholesteatoma chronic middle ear surgery is labyrinthine fistula.

In this conference titled: "Complications in chronic ear surgery" a definition and classification of labyrinthine fistulas will be showed. Then, key aspects will be addressed such as: pre-surgical diagnosis and intraoperative management.

During first section we will focus on symptoms and physical signs suspicious of a labyrinthine fistula. Additionally, special attention will be given to pre-surgical radiological testing. Such evaluation should be mandatory in order to prevent auditory and vestibular complications during surgery.

During second section attention will be addressed to surgical treatment, showing an algorithm depending on cholesteatoma location, etiology and severity of the disease.

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## Complications in Chronic ear surgery (R746)

**ID: 746.3**

### How to avoid the complications of temporal bone surgery

Presenting Author: **David Andrew Moffat**

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*Learning Objectives:* To teach all of the factors that increase the risk of complications of surgery to the temporal bone.

This presentation is based on the importance of the development of good and safe technique in the surgical management of patients with temporal bone disease in order to minimise the risk of complications. An outline of the principles of surgery in chronic suppurative otitis media is followed by a demonstration of the anatomy of the temporal bone by comparing a coronal cadaveric section with the corresponding coronal CT scan. The importance of temporal bone dissection, supervision and training, high resolution imaging and