

$\chi^2 = 1.8$ ,  $p > .05$ . Chi square test detected no significant difference among subgroups of stenotic EAC for cholesteatoma formation,  $\chi^2 = 2.5$ ,  $p > .05$ . Postoperative ABG less than 30 dB occurred in 77.3% (99/128) of the patients, and there was no significant difference between cholesteatoma and no cholesteatoma groups,  $p > .05$ . The complication rate of CAS was 13.8% (20/144), cholesteatoma group had a higher rate of complications,  $\chi^2 = 5.49$ ,  $p < .05$ .

**Conclusions:** Our results indicate that meatoplasty was an effective surgical intervention for CAS, there was a stability hearing outcome with prolonged follow-up. Jahrsdoerfer score was one factor which affected the postoperative hearing, but age was not the crucial factor in surgical indication. There was no significant difference among subgroups of stenotic EAC for cholesteatoma formation, and no significant difference between cholesteatoma and no cholesteatoma groups for hearing outcomes. But cholesteatoma group had a higher rate of complications.

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## Free Papers (F762)

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#### Middle cranial fossa approach to repair of temporal bone encephaloceles and CSF leaks with over 18 years experience with future implications on driving regulations in the UK

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**Learning Objectives:** Good hearing outcomes. Minimal risk of epilepsy. DVLA should reconsider band on driving for these patients.

**Introduction:** This paper details our experience in the management of 40 patients with temporal bone encephaloceles and cerebrospinal fluid (CSF) leaks, with the majority of patients managed via a middle cranial fossa approach (MCF) with bone graft, temporalis fascia and tissel. DVLA imposes a driving band for 6 months for cars and 2 years for HGV on all patients undergoing craniotomy regardless of indication.

**Objective:** To investigate the long-term follow-up of patients who had CSF leak repair: looking at effectiveness of repair, intracranial complications specifically seizures and hearing outcomes.

**Method:** A retrospective chart review of 40 patients undergone middle cranial fossa craniotomy for the treatment tegmen defect in a tertiary referral center from 1997 to 2015 was performed.

**Results:** Forty patients were identified who had undergone surgical repair of the dural defects through a middle cranial fossa approach. The mean age was 52 years (range 16 to 74) with male to female ratio of 2:3. Defects were

almost equally right and left sided with over 80% were spontaneous leaks. Nearly 90% of patients were treated with MCF approach and 10% with a combination of MCF and transmastoid as the defect also involved the posterior fossa. Majority of patients exhibited an improvement in hearing. A patient developed epilepsy post-operatively with MRI confirmation of temporal lobe inflammation. One other patient with pre-operative epilepsy continued to have seizures.

**Conclusion:** The MCF approach is an excellent route to effectively repair CSF leaks and encephaloceles due to tegmen tympani and dural defect. It carries an extremely small risk of epilepsy. Therefore, the band on driving enforced by DVLA for patients with no preoperative epilepsy undergoing craniotomy for CSF leak repair should be reconsidered.

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## Free Papers (F762)

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#### Subtotal Petrosectomy With Blind Sac Closure of the External Auditory Canal – Indications and Results

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**Learning Objectives:**

**Introduction:** Subtotal petrosectomy and blind sac closure of the auditory canal (STP) includes a canal wall down mastoidectomy with exenteration of all air cells, obliteration of the middle ear cleft with fat or temporalis muscle or a biocompatible material and closure of the external auditory canal. The indications for STP are weeping mastoid cavities, temporal bone malignancies, CSF leak and lateral base of skull surgeries. Hearing rehabilitation with a bone conduction hearing device or a cochlear implant can be offered. The aim of this study is to review the indications, results and hearing rehabilitation of the patients who underwent STP in our department.

**Methods:** All charts of patients who underwent STP between October 2011 and December 2015 were reviewed and analyzed.

**Results:** During this period 20 patients underwent STP. The average age was 46.9(13–81). 6 patients had cholesteatoma of them 5 were deaf in the operated ear. 1 patient had an encephalocele in a previously operated ear. 13 patients had a weeping mastoid cavity with no cholesteatoma. 4 patients had a Bone Anchored Hearing Aid and One patient had a Bonebridge implanted. 2 patients had a cochlear implant in a deaf ear. 1 patient had surgery for external auditory canal carcinoma. One patient with a weeping