

has recently been utilised in this group with favourable outcomes. A more challenging group are those with intractable vertigo and they have traditionally posed a significant management dilemma.

Methods: Retrospective case note review was performed in a tertiary referral centre. Three female patients with recurrent incapacitating attacks of vertigo despite conservative management underwent simultaneous labyrinthectomy and cochlear implantation. Two patients had unaidable hearing preoperatively. One patient had moderate-severe sensorineural loss and was suffering from frequent debilitating drop attacks that had resulted in injury.

Results: There was complete resolution of vertigo in all patients in our series. Speech perception in quiet and ability to hear in background noise improved in all cases. Review of the literature demonstrated a small number of cases worldwide in whom simultaneous labyrinthectomy and cochlear implantation have been performed with successful outcomes.

Conclusion: Surgical labyrinthectomy is an effective method for elimination of vertigo in patients with Ménière's disease. The major disadvantage in the past was loss of residual hearing. Cochlear implantation is now an option in these patients. The benefits of simultaneous labyrinthectomy with cochlear implantation include prevention of implantation of a fibrosed or ossified cochlea, a decrease in the duration of deafness and a single operative procedure. This technique should be considered as a management option in carefully selected patients.

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Magnetic Resonance Imaging surveillance after subtotal petrosectomy and blind sac closure: A review of radiological findings and long term follow up

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Learning objectives:

1. Learn about the MRI features of the temporal bone post SP BSC.
2. Understand more about the behaviour of the temporal bone when it has been isolated from the external environment.
3. Understand the role of MRI in surveillance of the temporal bone post SP BSC.

Introduction: Long term follow up is recommended following subtotal petrosectomy (SP) with cavity obliteration and blind sac closure (BSC) of the external auditory canal to detect recurrent or iatrogenic cholesteatoma and chronic otitis media (COM). Follow up has historically been a

challenge both clinically and radiologically. Recent advances in MRI have transformed our ability to survey patients post SP BSC. The objectives of this study were to: i. Characterise the MRI features post SP BSC; ii. Assess the behaviour of the temporal bone and disease persistence/progression post SP BSC; iii. Classify the radiological features and define their consequences for clinical care.

Methods: Retrospective case note review was performed in a tertiary referral hospital of 23 patients who underwent SP BSC between November 2004 and October 2013. MRI surveillance was carried out over a mean follow up period of 48 months (range 14–116). MRI features over time were compared to clinical course and surgical findings.

Results: Otitis media with effusion is a common finding in the unventilated temporal bone but appears to have little if any clinical consequence. Revision surgery was performed on clinical grounds in four patients (17%) and concerning imaging features but no clinical concerns in three patients (13%). Radiological findings correlated with operative and histological findings for cholesterol granuloma and mucosal COM but there was discrepancy in the diagnosis of cholesteatoma.

Conclusions: The MRI features of the temporal bone post SP BSC are described. A grading system for radiological findings is proposed to guide surveillance and possible further surgical intervention.

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Hearing loss and cognitive decline in Singapore: status quo of an island nation

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Learning objectives:

1. Understand the challenges related to hearing health and cognitive decline in seniors facing a small country that has undergone rapid development over the last 50 years.
2. Identify ways that may start to address these through education and research.

Introduction: The burden of dementia continues to rise worldwide. Hearing loss has been independently associated with accelerated cognitive decline and identified as an independent risk factor for all-cause dementia. Singapore is a small country facing a rapidly ageing population. This study aims to review the current status of hearing health and cognitive decline in seniors in Singapore.

Methods: A literature search of articles published in English was conducted based on PRISMA guidelines.

Results: The prevalence of dementia is estimated to be 10% in those ≥60 years and increases with age. Interethnic