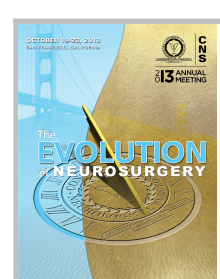


Vestibular Neurectomy for Intractable Vertigo: Case Series and Evaluation of Role of Endoscopic Assistance in Retrolabyrinthine Craniotomy

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Introduction

Vestibular neurectomy is an established treatment for intractable vertigo resistant to medical therapy. We describe here a contemporary series of fifteen consecutive patients undergoing retrolabyrinthine craniotomy for vestibular neurectomy with attention to the role of neuro-endoscopy.

Methods

The charts of all patients undergoing vestibular neurectomy for intractable vertigo treated by the senior author (GPL) via a retrolabyrinthine approach from August 2008- January 2013 were retrospectively reviewed. The surgical endoscope was opened for all cases; its utility was assessed and assigned a grade retrospectively based on operative findings according to the following grading scale: 0= not necessary; 1= helpful adjunct to assess completeness of nerve section; 2= necessary to complete exposure and/ or dissection.

Results

A total of 15 patients (8M, 7F; mean age 56.7) were identified. Indications included Meniere's disease (n=11), uncompensated vestibular neuritis (n=3), other vestibular neuropathy (n=1). Vertigo resolved in 14 patients; 5 experienced post-operative imbalance requiring vestibular rehabilitation. Two patients complained of imbalance at last follow up. Complications included hearing loss (n=1) and DVT (n=1). There were no facial nerve complications or mortalities.

Sectioning of the vestibular division of the VIIIth nerve was achieved without perceived benefit of endoscopy in the majority of cases (grade 0, n=12) (video). Endoscopy was felt to be helpful in patients with a small mastoid (grade 1, n=2), and was deemed to be necessary where the flocculus of the cerebellum was adherent to the VIIIth nerve arachnoid at the porous acoustic (grade 2, n=1) (video).

Conclusions

Retrolabyrinthine craniotomy for vestibular neurectomy is a safe and efficacious procedure for the treatment of vertigo. Patients with classic Meniere's disease may expect the greatest benefit from surgery; patients with uncompensated vestibular neuritis are less likely to have resolution of their symptoms. The surgical endoscope is a useful adjunct for vestibular neurectomy in selected cases.

Learning Objectives

By the conclusion of this session, participants should be able to: 1) Describe the indications and expected therapeutic benefits of vestibular neurectomy 2) Discuss, in small groups, the utility of the surgical endoscope as an adjunct to retrolabyrinthine craniotomy 3) Identify effective treatment alternatives for intractable vertigo.