

Cerebrospinal fluid rhinorrhea following Acoustic Neuroma Surgery

Cormac G. Gavin MBBS FRCSI FRCS(Neuro.surg); R. Bradford

Skullbase Service, Molly Lane-Fox Brain Tumour Unit, The National Hospital for Neurology & Neurosurgery, Queen Square, London, U.K.



Introduction

Since Dandys original report of cerebrospinal fluid (CSF) otorrhoea following surgery for acoustic neurinoma, the problem of CSF leakage with its inherent risk of meningitis has been a troublesome and frequent problem. We present our surgical technique for prevention of postoperative CSF leak & outcomes

Methods

We retrospectively reviewed our Skullbase database for all patients undergoing a posterior fossa craniectomy for vestibular schwannoma. Our closure technique has evolved from the senior authors experience to comprise of craniotomy with preservation of free bone flap & bone dust, drilling of mastoid air cells & packing with bone wax & bone dust, dural closure with dural substitute & TISSEAL. Most importantly we place a gravity wound drain below the muscle layer for 3-5 days.

Learning Objectives

Recognition & prevention of CSF Fistulae in surgery for vestibular schwannoma.

Complication avoidance.

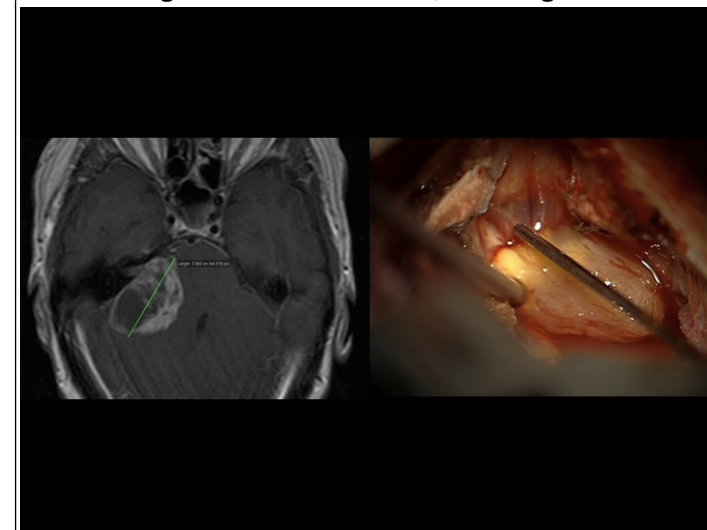
Results

224 patients (age range 16 - 80 years) underwent retrosigmoid craniectomy for vestibular schwannoma with postoperative CSF leak in 14 patients (7.6%). 4 patients required VP Shunt for associated hydrocephalus.

Conclusions

Meticulous closure & the use of a gravity drain minimise CSF leak rate in acoustic neuroma surgery

Large Acoustic Neuroma, Retrosigmoid



References

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Approach design and closure techniques to minimize cerebrospinal fluid leak after cerebellopontine angle tumor surgery.

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