

Introduction

Surgical excision of giant vestibular schwannomas continues to demand high degree of surgical skills. The surgical techniques for this have been described quite extensively and elegantly in the literature over the last 3 decades. We describe our technique for management of these patients.

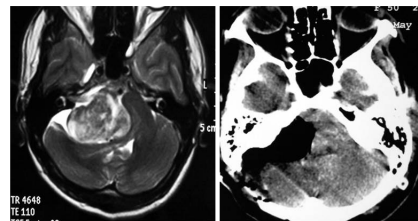
Methods

We believe that, in giant tumors, the extra-meatal component needs removal first. We tailor the meatal drilling (determined by the degree of intra-meatal extension) and prefer to maximally decompress the tumor before this step. The aim of 'complete intra-arachnoidal dissection' is to always have a barrier of arachnoid layers between the plane of dissection and the tumor. Under high magnification, the arachnoid layers are sharply cut and once the ragged tumour surface is seen, tumor decompression is done.

fig



fig 1

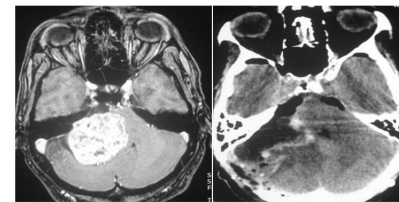


Giant vestibular schwannoma with no intrameatal tumour
Total excision without meatal drilling

Results

80 cases of Giant vestibular schwannomas were operated over a period of 4 years from 2009 to 2014 using the complete intra-arachnoidal and tailored drilling technique. Total excision was noted in 70 cases while subtotal excision was noted in 10 cases. Anatomical preservation of 7th nerve was achieved in all cases, except one. Functional preservation of hearing was achieved in 4 patients.

fig 2



Less than 2mm intrameatal extension-
total removal without meatal drilling

fig 3



Conclusions

'Complete intra-arachnoidal dissection' and 'Tailored drilling of the internal auditory canal' are highly effective and safe techniques for the excision of giant vestibular schwannomas. They are likely to enhance the safety and efficacy offered by intra-operative monitoring techniques in improving the outcome of patients harbouring giant vestibular schwannomas.