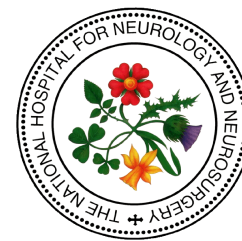


Multidisciplinary Management of Acoustic Neuroma: A Neurosurgical Perspective

Cormac G. Gavin MBBS FRCSI FRCS(Neuro.surg); Hussein El-Maghraby MD FRCS(SN); Robert Bradford MD, FRCS
The Skull Base Service, Brain Tumour Unit, The National Hospital For Neurology & Neurosurgery, Queen Square, London
U.K.



Introduction

The management of acoustic neuroma has changed over the years, early diagnosis together with improved imaging facilities & the availability of different management options have raised patients' treatment expectations. Three main therapeutic options are available: Surgery, radiotherapy, and conservative management or "watch(Scan) & wait". We report our experience in the multidisciplinary management of acoustic neuroma at our dedicated skull base clinic over the past 20 years.

Methods

From 1990 to 2010, we have maintained a database of patients presenting to our multidisciplinary skull base clinic. This contains in excess of 500 patients Data was also acquired from retrospective chart review. Hearing was assessed according to the Gardner-Robertson classification & facial nerve function was assessed according to the House-Brackmann Grade. Maximum Tumour Dimension (MTD) was classed as the longest measurable distance on a single image on T2 MRI.

Results

There was a linear increase with time in the proportion of preoperative patients with serviceable hearing. This trend is statistically significant. Tumour size became significantly smaller year on year. This may correspond to observed change in the clinical presentation of acoustic neuroma. Our experience is that though surgery remains the cornerstone of management, its overall contribution is falling, whilst increasingly more cases are being managed with radiotherapy and conservative management.

Factors associated with a decision to operate were

Age <65

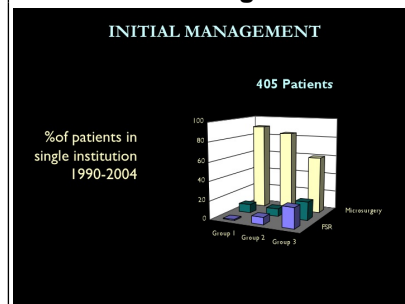
Tumour size > 25 mm

Serviceable hearing at presentation

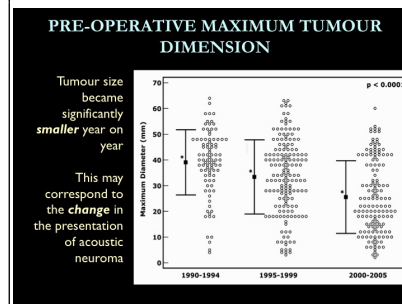
Learning Objectives

There has been an evolution in the management of acoustic neuroma as witnessed over the past 2 decades. We are seeing smaller tumors & fewer cases with hearing and or CN VI dysfunction. There has been a trend towards greater use of stereotactic radiotherapy and in a "watch & wait" policy. Microsurgical emphasis has shifted to facial nerve & hearing preservation where possible.

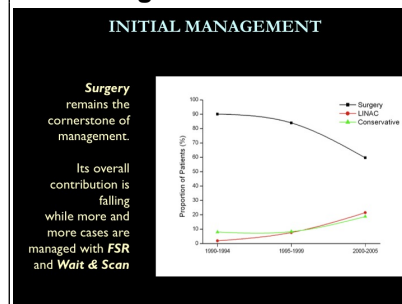
Initial Management



Tumor Size



Management Evolution



Conclusions

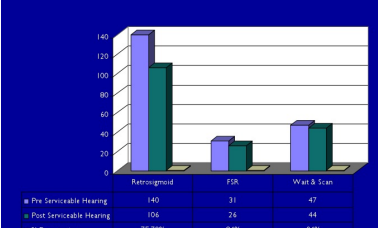
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Serviceable Hearing

OUTCOME OF SERVICEABLE HEARING- ALL TUMOUR SIZES



OUTCOME VIITH PRESERVATION- ALL TUMOUR SIZES

