



ACOUSTIC NEUROMAS

Loyola Center for Cranial Base Surgery
Loyola Department of Otolaryngology – Head and Neck Surgery

INTRODUCTION

Acoustic neuromas are benign tumors that originate in the inner ear, but have the potential to spread toward the brain. The usual presenting symptoms of an acoustic neuroma are hearing loss, tinnitus, and imbalance. Although acoustic neuromas occur in only one out of 100,000 people, it is the most common intracranial tumor seen at our center. Since 1987, we have seen over 5000 patients with acoustic neuromas and have performed almost 1000 microsurgical procedures for this relatively rare tumor.

CLINICAL EVALUATION

Acoustic neuroma patients require a complete head and neck physical examination, a microscopic ear examination, a thorough audiogram (hearing test), and a magnetic resonance imaging study. This assessment will provide information pertaining to the amount of hearing loss, the size and location of the tumor, and the relationship of the acoustic neuroma to important neurovascular structures.

TREATMENT OPTIONS

Patients with small tumors who are elderly or medically infirmed are followed with surveillance MRI and audiograms. State-of-the-art focused radiotherapy may be used in some patients with small acoustic neuromas. Microsurgical acoustic neuroma removal is the gold standard treatment for most patients. Hearing preservation (middle cranial fossa, retrosigmoid approach) or hearing ablative (translabyrinthine or transcochlear approach) are utilized, depending on tumor size, location, and level of hearing.

EXPERIENCE

The Loyola Center for Cranial Base Surgery was established in 1987. We have evaluated over 5000 patients with acoustic neuromas in this 20-year period. Our surgical experience is based on the operative treatment of almost 1000 of these patients.

Total or near-total tumor removal was achieved in 98% of these patients with a risk of tumor regrowth of less than 1%. The risk of temporary facial weakness in this series was 4%, with all patients regaining facial function within three to six months. The risk of cerebrospinal fluid leak was also 4%. Hearing was successfully retained in 65% of patients who underwent a hearing preservation approach for their acoustic neuroma. There were NO deaths or major permanent neurologic deficits in our series of almost 1000 operated acoustic neuromas. The average hospital stay was 3.7 days with most patients returning to work in three to four weeks.

SUMMARY

The Loyola Center for Cranial Base Surgery has offered diagnostic and treatment options for more than 5000 patients with acoustic neuromas over a 20-year time span. We remain leaders in the research of this unique and uncommon tumor, and provide the most contemporary rehabilitation options for hearing loss, facial weakness, and imbalance.

For more information or to schedule a consultation, call 708-216-2118

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