Intraparotid facial nerve schwannoma: management decision based on facial nerve function.

The Mayo Clinic Experience
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BACKGROUND
Facial nerve schwannomas are extremely rare tumors with an estimated incidence of 0.2 to 1.5% of parotid tumors. They can occur at any location along the facial nerve from the cerebellopontine angle to the most peripheral branches, and only 9% involve a portion of the intraparotid facial nerve. Early diagnosis is critical in order to optimize the long term functional outcome of the facial nerve. Unfortunately, no diagnostic study is sensitive or specific. Most intraparotid facial nerve schwannomas (IPFNS) are diagnosed intraoperatively based on the tumor’s intimate association with the facial nerve and frozen histopathology.

Management options present a dilemma: whether to observe or resect a benign mass of uncertain future behavior when resection may result in disfiguring facial paralysis. Options include conservative management with observation, tumor debulking, or complete tumor removal with nerve grafting.

PURPOSE
1. To review the Mayo Clinic experience with intraparotid facial nerve schwannomas (IPFNS).
2. To gain insight into the diagnosis and management of IPFNS.

METHODS
Retrospective review of all cases of intraparotid facial nerve schwannomas at the Mayo Clinic Rochester, Minnesota between the years of 1975 and 2010. This study was approved by The Mayo Clinic Institutional Review Board.

RESULTS
• A total of 15 cases of intraparotid facial nerve schwannoma (IPFNS) were identified between 1975 and 2010.
• Age range at presentation was 27 to 66 years old with mean age of 41
• 8 Female; 7 male
• Clinical presentation was a painless parotid mass with normal facial nerve function in 13 of 15 cases
• Duration of symptoms before diagnosis ranged from 4 months to 20 years with a mean of 38.3 months

INTRAOPERATIVE CLUES TO DIAGNOSIS OF FACIAL NERVE SCHWANNOMA: GROSS EXAMINATION OF NERVE – MASS RELATIONSHIP

| Nerve splayed over tumor | 2 |
| Nerve pierced tumor | 7 |
| Mass loosely attached to periphery of nerve | 3 |

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BIBLIOGRAPHY