CASE REPORT

Neurilemmoma of Parotid

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Abstract

An unusal case of neurilemmoma of parotid gland arising in a 14 year old boy is reported. The presentation was a painless mass and the facial nerve functions were intact. Peroperatively tumour did not have any relation with facial nerve. Fine needle aspiration cytology could give a clue towards neurogenic nature of the tumour.

Key Words

Neurilemmoma, Schwannoma, Parotid.

Introduction

Neurilemmoma or neurinoma, is an ectodermal benign tumour arising from schwann's cells. Although these tumours are widely distributed in head and neck region, they can arise from facial nerve as well (1,2). The common presentation of neurilemmoma of parotid region is a painless mass, whereas those arising from facial nerve mostly have facial paresis (2-4). Neurilemmomas are rare parotid tumours. Balle *et. al.* reported only two cases among 142 cases of parotid tumours seen over a period of 6 years (5). Most of these develop in facial nerve or its branches, as they course through parotid. Preoperative diagnosis of intraparotid neurilemmoma is difficult and fine needle aspiration cytology, although has a high diagnostic specificity in parotid tumours, is reported to have no diagnostic value in intraparotid neurilemmoma (1). This case is being reported here in view of rarity of these tumours in this region, absence of facial weakness and any direct relation of tumour with facial nerve and its branches.

Case Report

A 14-years old boy was admittted with a painless slowly progressive left parotid mass of 6 month duration. There was no other symptom. On examination, the mass was ill defined, nontender, firm, mobile measuring 6 cms × 4 cms. It extended from the zygomatic arch to short of angle of mandible and from preauricular region to anterior border of masseter in vertical and horizontal planes respectively. Facial nerve functions were normal. Rest of E.N.T. and general physical examination did not reveal any abnormality. The laboratory tests were within normal limits. Fine needle aspiration cytology (FNAC) was consistent with neurogenic tumour. The mass was exposed through a classical parotidectomy incision and removal of the superficial lobe was done. A well

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encapsulated mass was present in the substance of deep lobe of parotid gland and was easily enucleated in toto (Fig. 1). The mass was not in direct relation with facial nerve or its branches. All the branches of facial nerve are shown intact after removal of tumour (Fig 2). Patient developed partial facial paresis which recovered in a few weeks. He is disease free on 2 year follow up.

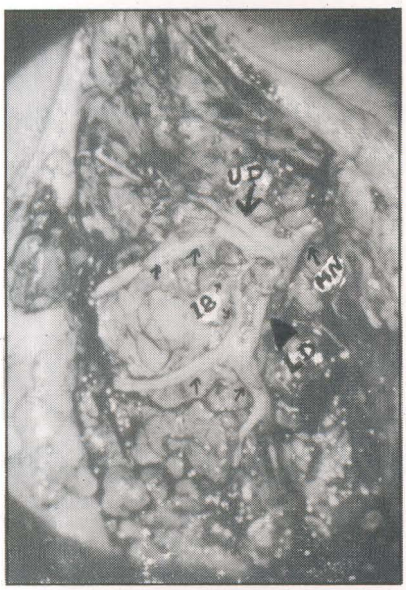

Fig. 1 : Showing main trunk and all intact branches of facial nerve after superficial parotidectomy.
MN = Main Trunk, UD = Upper Division, LD = Lower Division,
IB = Intercommunicating Branches.

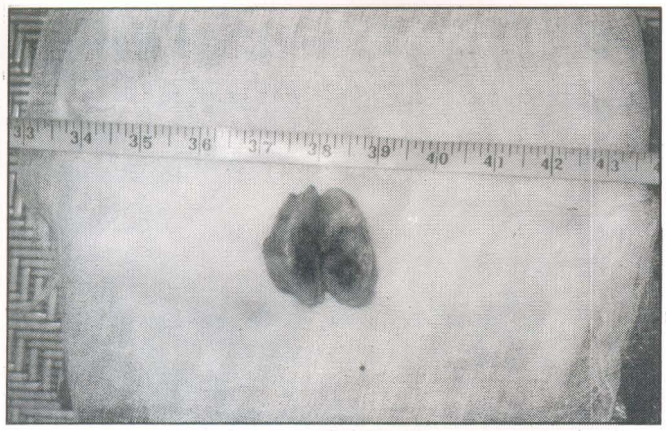

Fig. 2: Specimen of excised tumour.

Discussion

Schwannomas or neurogenic tumours of salivary glands are very rare. Intraparotid schwannoma presents as a slowly growing non-tender parotid swelling without facial weakness. Most authors (6,7) find it difficult to establish a correct preoperative diagnosis of facial nerve neuroma. Conley and Janeeka reviewed 17 patients with 23 neurilemmomas of the facial nerve and in only three cases a correct pre-operative diagnosis was made (6). Out of these, 17 patients had intratemporal neurilemmomas but those tumours presenting as parotid masses were all misdiagnosed as primary parotid tumours(6). FNAC has a high diagnostic specificity in primary parotid tumours. Balle and Graisen (5), reported two cases who had FNAC performed a total of five times, 4 of these were nondiagnostic, while in fifth there was a suspicion of adenolymphoma. Our case was reported as a neurogenic tumour and underwent FNAC once only. On the other hand, we feel that neurilemmomas of parotid are too rare to be suspected if FNAC turns out to be nondiagnostic. Usually, neurilemmomas arise from main trunk or branches of facial nerve as they course through parotid gland. Rarely, the tumour might be found to have no relation with facial nerve or its branches (8) as was seen in our case. Neurilemmomas of lateral region of neck are frequently not found to be associated with any large nerve, as reported by Putney *et. al.* and Kragh *et. al.* emphasized this point, who found that nerve of origin was indentified in only 22 out of 80 cases of neurilemmomas of lateral cervical region (1,9). Occurence of this tumour in parotid region is rare. Das Gupta *et. al.*, among 136 cases of solitary schwannomas of head and neck, found only

10 lesions in the parotid region and in majority of their cases, the nerve of origin could not be ascertained (10).

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