

An Unusual Case of Intraparotid Facial Nerve Schwannoma

D Belekara, V Dewoolkar, A Desai, A Desai, J Anam, M Parab

Citation

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Abstract

Schwannomas are solitary and encapsulated tumors attached to or surrounded by nerve. The vagus nerve is the most common site. Very few originate from the facial nerve and in the majority of these cases; the tumor involves the intratemporal seventh nerve. We present a case of a 20-year-old female with intraparotid schwannoma of the left-sided facial nerve.

CASE HISTORY

A 20-year-old Muslim female came with complaints of lump in the left parotid region for 2 years and deviation of the left angle of the mouth for the past 3 years.

She had noticed a small lump in the left infra-auricular region 2 years ago. This progressively increased in size from about 0.5cm in diameter at the beginning to about 6cm at presentation.

She had developed a similar swelling around three years ago, for which she had consulted another surgeon. Superficial parotidectomy was done then with parotid cyst excision. Immediately after the surgery, the patient had noticed deviation of the left angle of the mouth and the left side of the face with occasional dribbling of saliva. However, the patient was able to close her eyes completely.

Histopathology of the lesion which was excised then was suggestive of neurilemmoma. However, the patient had not followed up with the surgeon then, and no further treatment was taken.

The patient did not have history of earache or discharge from the ear, fever or upper respiratory tract infection. There was no pus discharge from the swelling or ulceration.

The patient was diagnosed with tuberculous lymphadenitis (posterior triangle lymphadenopathy) for which she had taken a full course of antitubercular drugs.

On examination, she had normal pulse rate and was normotensive. There was a single oval swelling of 5 x 3 x 1cm in the left pre- and infra-auricular region with lifting of the pinna of the ear. Swelling was firm, non-tender and the

skin over the swelling appeared stretched out with no redness, overlying sinuses or ulcers. The scar of the previous surgery was seen.

Ear, nose and throat examination was within normal limits. There was no parapharyngeal bulge.

She had evidence of left lower motor neuron type of facial palsy.

Figure 1

Figure 1: External appearance of the tumor along with the previous operation scar.



Her CBC, LFT and RFT were within normal limits.

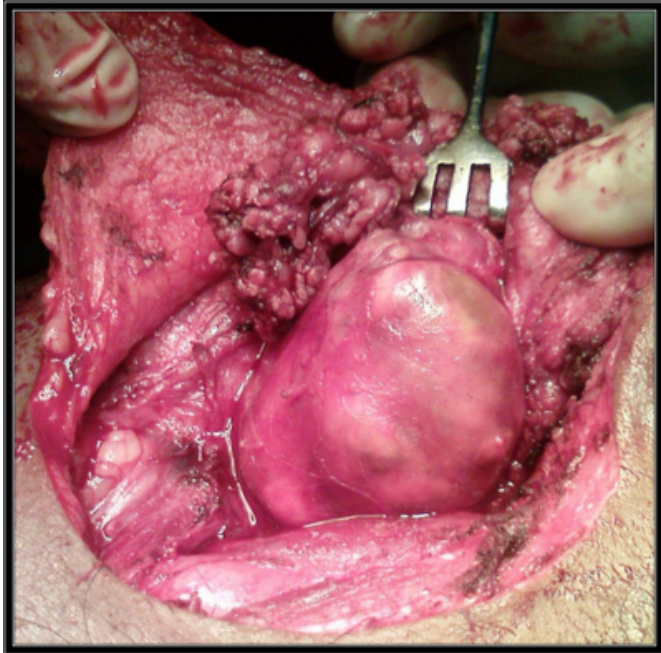
The FNAC was suggestive of benign spindle cell neoplasm, probably neurogenic in origin.

The patient was subjected to left-sided superficial parotidectomy. A tumor of about 6 x 4 x 0.5cm was seen

arising from the facial nerve and was resected.

Figure 2

Figure 2: Cystic tumor embedded within the deep lobe of the parotid gland.



The left facial nerve was sacrificed in the process. The services of the cosmetic surgeon were utilized for face lifting. The procedure of left-sided facial lift was performed. Her postoperative course was uneventful.

The histopathology report was suggestive of schwannoma with cystic change. The superficial lobe of the parotid gland did not show any pathology.

The patient has followed up for 6 months post-operatively without any recurrence. She has complete left-sided facial palsy.

Figure 3

Figure 3: Specimen of the whitish tumor excised.



DISCUSSION

A schwannoma is an ectodermal benign encapsulated tumor arising from Schwann cells [1]. Neurogenic neoplasms of the facial nerve are uncommon [2]. Schwannomas of the acoustic or VIIIth nerve are well described [2].

Schwannomas are solitary and encapsulated tumors attached to or surrounded by nerve. The vagus nerve is the most common site [3].

Benign schwannoma is a slow-growing encapsulated tumor arising from the neuroectodermal sheath of Schwann. Approximately 25-30% of all reported schwannomas occur in the head and neck and most of these in the eighth nerve [2].

Neurilemmomas of the facial nerve may arise from its extratemporal or intratemporal course. The main symptoms are usually those of facial weakness or paralysis [1, 4].

Diagnosis requires CT or MRI scanning to differentiate them from other tumours, but, on occasions, the diagnosis must wait till excision.

Neurogenic tumors should be suspected intraoperatively when they are inseparable from the nerve and electrical

stimulation of the tumor elicits facial movement. Surgical resection remains the definitive treatment although benign tumors associated with normal facial function may be carefully followed with serial electroneurography and computerized tomography when electrical testing reveals minimal evidence of progressive neural degeneration [5].

On gross examination, the tumor was well encapsulated. The cut surface was relatively homogenous, glistening, tan or gray with irregular yellow areas and variable cystic degeneration. The tumor is often adherent to the nerve. Microscopically, the tumour shows two patterns, Antoni Type A, i.e. cells are spindle-shaped, compactly arranged with long oval nuclei oriented with their long axis parallel to each other (nuclear palisading) and Antoni Type B, i.e. with less cellular areas, reticular, with cells showing vacuolation and xanthomatous change. The blood vessels show

hyalinised walls. Our case was of Antoni type B. Such a surgery may be followed by nerve grafting with the hypoglossal nerve or greater auricular nerve [6].

CORRESPONDENCE TO

Dr. Amit A. Desai, 201, Prasad Prkalp, Ahimsa Marg, Khar (W), Mumbai 400052. Contact No.: Mobile +919820362310
Email ID: amitdr55@hotmail.com

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Author Information

Dnyanesh M. Belekar, MBBS, MS, FCPS, DNB, MNAMS, FMAS, FAIS

Associate Professor, Dept of General Surgery, K. J. Somaiya Medical College, Hospital and Research Center

Vinayak V. Dewoolkar, MBBS, MS

Dean and Professor of Surgery, Dept of General Surgery, K. J. Somaiya Medical College, Hospital and Research Center

Amit A. Desai, MBBS, MS, DNB

Senior Post Graduate Registrar, Dept of General Surgery, K. J. Somaiya Medical College, Hospital and Research Center

Arvind Desai, MBBS, MS

Cosmetic Surgery, Dept of General Surgery, K. J. Somaiya Medical College, Hospital and Research Center

Jay R. Anam, MBBS

Senior Registrar, Dept of General Surgery, K. J. Somaiya Medical College, Hospital and Research Center

Mrunal B. Parab, MBBS

Surgery Resident, Dept of General Surgery, K. J. Somaiya Medical College, Hospital and Research Center