Intramasseteric Neurofibroma masquerading as Parotid Tumour

By Kartikeya Agarwal – Affiliated to the Department of ENT

INTRODUCTION

Neurofibromatosis are Benign Tumours that grows on nerves in the body. They consist of overgrowth of Nerve tissues along with Blood Vessels and other types of cells and fibres. History, physical examination, fine needle aspiration, and magnetic resonance imaging are used as diagnostic modalities, however definitive diagnosis and identification of the affected nerve are often difficult up to the time of surgery.

Neurofibromas form **deeper in the body making them more difficult to diagnose.** They can grow for a long time without causing major symptoms, and can resemble other tumours.

CASE REPORT

The patient presented with a **left cheek swelling below and in front of the ear, noticed in past.** The swelling, initially small-sized, grew to 4*3cm, **ovoid, regular swelling which was painful, with increased intensity.** There were no associated symptoms like fever, facial asymmetry, or difficulty in swallowing.

Investigations included an ultrasound and CECT neck, showing a **hypodense cystic lesion in the left masseter muscle with mild compression of the parotid gland and some bilateral lymph nodes**. Although multiple investigations were done, diagnosis was obscure and difficult before definite surgical resection. Surgery Showed an isolated Masseteric Mass around 2 cm globular Cystic, noted at junction of 2 terminal branches of left facial nerve- Temporal and Zygomatic Branches.

Histopathologic findings of Biopsy confirmed the diagnosis of **Neurofibroma with the characteristic hypocellular areas of Spindle cells interspersed collagen bundles with myxoid areas.**

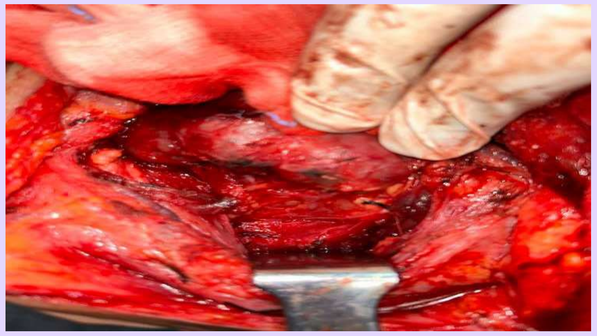
MANAGEMENT

MEDICAL MANAGEMENT

- TAB AUGMNETIN 625MG
- TAB ENPEN 40MG

SURGICAL MANAGEMENT

- Patient Underwent left **Superficial Parotidectomy with Excision of Masseteric Muscle under General Anesthesia**
- He was Later Discharged with the normal **Facial nerve function bilaterally**



DISCUSSION

This case report highlights the diagnostic challenges of neurofibromas, particularly when they present as deep-seated tumours such as those in the masseter muscle. The patient's initial symptoms of a growing, painful swelling in the left cheek, coupled with imaging findings of a cystic lesion, can mimic other conditions like **Schwannoma**(A benign peripheral nerve sheath tumour comprised predominantly of Schwann cells), **Perineuroma** (A rare, benign mesenchymal tumour comprised of perineural cells), **Dermatofibroma**(A benign proliferation of fibroblasts and histiocytes within the dermis), **Parotid Gland Tumours** (Benign Pleomorphic Adenoma, Warthin Tumour)**, Plexiform fibrohistiocytic tumour**(An infiltrative mesenchymal neoplasm, most commonly at the dermal-subcutaneous junction, comprised of fibroblasts and histiocytes)and **Desmoplastic melanoma**(An invasive melanoma that often resembles a dermal scar) **making differential diagnosis difficult. Neurofibromas, being benign nerve sheath tumours, often grow slowly and can remain asymptomatic for extended periods, complicating early detection.** In this case, while imaging techniques were used to assess the extent of involvement in Parotid area, the **definitive diagnosis was elusive until surgical intervention.**

CONCLUSION

This case underscores the **importance of considering neurofibromas in differential diagnoses of deep facial swellings, especially when conventional imaging does not provide a clear diagnosis**. It also highlights the necessity of **surgical exploration and histopathological examination for definitive diagnosis in such challenging cases.**