



Pheomorphic Adenoma in an Young Man Over 30 Years Duration A Rare Presentation

DR. S. T. VED BHUSHAN*, DR. ASHOK KAULGUD¹, DR. RANJIT KANGALE²

1. MS, ASSISTANT PROFESSOR, USM-KLE-IMP AND KLE CENTENARY CHARITABLE HOSPITAL, YALLUR ROAD, BELAGAVI KARNATKA.

2. MD (Pathology), PROFESSOR J. N. MEDICAL COLLEGE, KLE UNIVERSITY – BELAGAVI 590010.

***Correspondence to:** DR. S. T. VED BHUSHAN, MS, FAIS, PROFESSOR OF SURGERY, USM-KLE-IMP AND CONSULTANT KLE CENTENARY CHARITABLE HOSPITAL, YALLUR ROAD , BELAGAVI, KARNATKA 590010.

Copyright

© 2023 : **DR. S. T. VED BHUSHAN**. This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Received: 14 July 2023

Published: 01 August 2023

Abstract

Pleomorphic adenomas are benign salivary gland tumour which mainly affect the superficial parotid glands. They are slowly progressive asymptomatic swellings. Pleomorphic adenomas are also known as benign mixed tumours(1) Pleomorphic adenoma mostly affect major salivary glands (85 %) and minor salivary glands 10% and submandibular glands 5% (2). In some cases it may involve the deep lobes of parotid gland.

Occasionally Pleomorphic adenoma are seen in palate , cheek , lip and tongue including the floor of the mouth(4).

Keywords: *Pleomorphic adenoma, Parotid tumour, parotidectomy.*

Case Report

A 43 years old man was admitted with history of painless swelling over right side of the cheek over-30 years. It was small initially and progressed gradually. There was no history of pain, difficulty in eye movement or asymmetry of the face. 30 years duration of the swelling was confirmed by the relatives.

On examination the patient was middle aged man in good health with stable vital signs.

Local examination revealed a large swelling over the right cheek, oval in shape with ear lobule elevation.

It was firm to palpate and was not adherent to either skin or deeper structures. The facial nerve examination was normal.

There was no lymphadenopathy in the neck. A clinical diagnosis of PAROTID TUMOUR (BENIGN) was made and all relevant investigations was done.

Investigation

HB: 16.2% TC :7500 PLT: 202000

N -55% L-40 % E-3% B-0%

GLUCOSE: 150 UREA : 29.3 CREAT: 1.48

HBSAG :NEG

HIV :NEG

URINE :NAD

FNAC: SUGGESTIVE OF PLEOMORPHIC ADENOMA

Chest XRAY : NAD

XRAY NECK SOFT TISSUE (AP AND LATERAL) IMP-SPONDYLOSIS CHANGES NOTED IN THE CERIVAL SPINE.

ECG: WNL

Pre-Operative medical consultation was done and he was fit to undergo the operation.

Operation:

The operation was performed under GA in April 2023 with head turned to the left side and pillow under the neck. A longitudinal incision was made over the tumour. Careful dissection was done to raise the flaps. Two branches of facial nerves was identified and kept away. All around the tumour dissection was done there was some adhesion posteriorly but came of easily.

The entire tumour was excised. Haemostasis was achieved. Surgical incision was closed in layers with suction drain. Post operative period was uneventful. He received IV fluids antibiotic and analgesics for 3 days. Drain was removed on the 4th day. He was discharged on the 5th day. Suture were removed on the 7th Day.

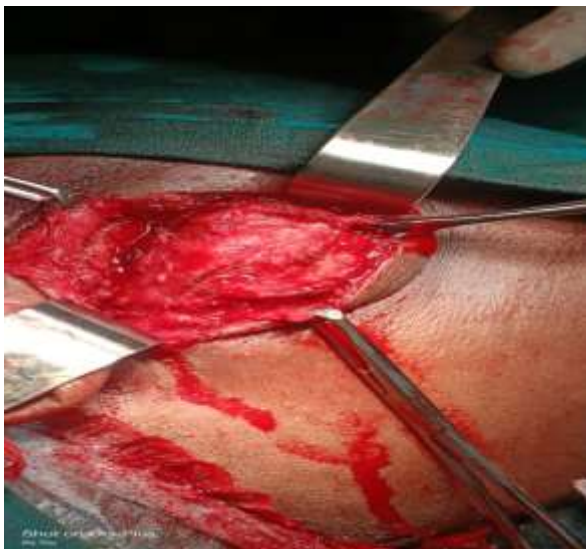
Histopathology was reported as PLEOMORPHIC ADENOMA right partid gland with chronic inflammatory infiltrate with no evidence of malignancy.



Pre-operative



Intra-Operative



Intra-Operative



EXICISED Specimen



Gross Cut Section Specimen.

Discussion

Pleomorphic adenoma (Benign ,mixed Tumour) is common salivary gland neoplasm. It is characterised by the ductal (Epithelial) along with myo- Epithelial components in the tumour.

Clinical Presentation:

Pleomorphic adenomas are slow growing, progressive and painless usually affects one gland and it is usually painless, firm mass without involvement of facial nerve(5).

Parotid tumour is usually a solitary tumour and grows slowly and it is a firm, nodular mass. When it involves the parotid tail then the ear lobule is upturned or seen in our patient.

In one case report a 50 year old lady presented with a parotid swelling on the left side over 5 year. Size was about 10cm x 8 cm.

She underwent resection of the tumour (6). In another report a 85 year old lady had a parotid swelling over the right side slowly growing over 20 years. Size was 26 cm in diameter tumour excision was done and the weight was 6.85KG(7)

In our case the parotid tumour on the right side slowly growing over 30 years.

Imaging Studies

There are many imaging studies from ultra sonography to CT and MRI to know the details of anatomy of the parotid gland and its involvement to the surrounding structure.

FNAC is very important to know about the pathological status and to plan the surgery. We have done USG and FNAC

USG report: A well-defined hypo echoic mass lesion is seen involving predominantly in the right parotid gland. The lesion measure 4.5 cm x 3.5 cm with focal calcifications noted.

The lesion is highly suggestive of Pleomorphic adenoma. Left parotid gland is normal. No cervical lymph nodes noted.

FNAC report: It is reported as benign, mixed parotid tumour.

Core biopsy can also be done which is more accurate but may not be needed in all cases hence it is not done routinely (8).

Management.

Surgical resection is the mostly recommend treatment for the parotid tumours(benign tumours). Malignant tumours may require wide resection with postoperative Radio Therapy(9) . Detection of early stage of parotid tumour is important in terms of post-operative prognosis. Eenucleation of the tumour intra capsular (Dissection) was the common procedure done in the past now it is obsolete and not practiced now a days due to high recurrence.

The current recommendation of surgical choice for parotid pleomorphic adenoma is mainly based on its size, location and mobility of the tumour. Surgical procedure used are superficial parotidectomy, and total parotidectomy. Benign parotid tumours need superficial parotidectomy with preservation of facial nerve as we did in our case.

In a Danish study of Pleomorphic adenoma of parotid gland from 1985-2010 in which there were 5497 cases, in which there were 2.86% had at least one recurrence with incidence of 4.29/ 100.00 year and. Malignant transformation was around 3.3%(10).

References

1. Califano J, Eisele DW. Benign salivary gland neoplasms. *Otolaryngol Clin North Am.* 1999;32:861-873. [PubMed]
[Google Scholar].
2. Luna MA. Salivary glands. In: Pilch BZ, editor: *Head and neck surgical pathology.* Philadelphia: Lippincott Williams & Wilkins; 2001. pp. 284-349. [Google Scholar]
3. Morita N, Miyata K, Sakamoto T, Wada T. Pleomorphic adenoma in the parapharyngeal space: report of three cases.] *Oral Maxillofac Surg.* 1995;53:605-610. [PubMed] [Google Scholar]

4. Vicente OP, Marques NA, Aytes LB, Escoda CG. Minor salivary gland tumors :a clinicopathological study of 18 cases. *Med Oral Patol Oral Cir Bucal*. 2008;13(9):582-588. [PubMed] [Google Scholar]
5. Sergi B, Limongelli A, Scarano E, Fetoni AR, Paludetti G. Giant deep lobe parotid gland pleomorphic adenoma involving the parapharyngeal space. Report of three cases and review of the diagnostic and therapeutic approaches. *Acta Otorhinolaryngol Ital*. 2008;28:261-265. [PMC free article] [PubMed] [Google Scholar].
6. Sage JL Vol 77, issue 8, Year 1998, DOI. ORG. 10. 1177101-455613480710082.
7. SJain –etal, *Ethio J Health Sci* – 2015 APR: 25(2)189-194.
8. Wan YL Chan SC Chen YL, Cheung YC, Lui KW, Wong HF, et al, (October 2004). “Ultrasonography –guided core-needle biopsy of parotid gland masses”, *AJNR American Journal of Radiology* 25(9): 1608-1612. PMID 15502149.
9. Psychogios G, Bohr C, Constantinidis.J, Canis M, Vander Poorten V, Plzak J, Et al. (January 2021). “Review of surgical techniques and guide for decision making the treatment of benign parotid tumors”. *European Archives Oto-Laryngology* 278(1): 15 – 29. PMID 32749609.
10. Pleomorphic adenoma of the parotid gland 1985-2010: A Danish nationwide study of incidence, recurrence rate , and malignant transformation . Simon Andreasen, Marianne H Therkidsen , Kristine Bjorndal, Preben Homoe Affiliations expand. PMID 26382619.

