



MALIGNANCY IN DISGUISE: A CASE REPORT OF BENIGN APPEARING SALIVARY TUMOR

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ABSTRACT

Salivary gland tumors arise from parotid, submandibular, sublingual, minor salivary gland regions. The most common benign salivary gland tumors are pleomorphic adenoma, Warthin's tumor. The most common malignant salivary tumors are mucoepidermoid carcinoma, acinic cell carcinoma, adenoid cystic carcinoma. We report a case of 47-year-old female patient presenting with complaint of swelling in right pre-auricular region for 2 years, associated with pain for 20 days. Pre-operative Diagnostic workup (USG, FNAC, CECT) suggests of Benign disease entity. Excision of Parotid tumor was done with Modified Blair incision under GA and sample was sent for Histopathological examination. Biopsy report suggests of High Grade Mucoepidermoid Carcinoma, radiotherapy was given to the patient. Salivary gland tumors present with varying histology, they often require multimodal therapy involving surgery, radiation, and chemotherapy.

KEYWORDS : Salivary Gland Tumors, Facial Nerve, Mucoepidermoid Carcinoma, Radiotherapy**INTRODUCTION**

Salivary gland tumors comprise of 3 to 10% of all head and neck neoplasms.¹ They most commonly occur due to exposure to radiation, viruses (EBV and HIV), immunosuppression, occupational exposures in rubber or nickel industries.²

Here we present a case of parotid gland tumor presenting as a benign entity in all preoperative investigations, Excisional biopsy histopathological report turned out to be a malignant tumor.

Case Report

A 47-year-old female patient, housewife, presented to OPD with complaints of swelling in right pre-auricular region progressively increasing in size for 2 years, associated with pain for 20 days.

On Examination

A diffuse swelling in right parotid region is present



Figure Showing a Swelling on the Right Parotid Region

Inspection: A swelling of 3*2cm is seen on the right parotid region, surface of the swelling is smooth, no ulceration.

Palpation: No tenderness, No local rise of temperature.

Facial nerve examination is normal.

Investigations:

Routine Blood Investigations – within normal limits.

Patient is known Hypothyroid and is using medication, Thyroid profile (T3, T4, TSH) – within normal limits.

Radiological Examination –

- USG NECK: suggests of Warthin's tumor in Right Parotid / Lymph node with cystic degeneration (needs FNAC correlation).
- FNAC: suggests of Benign salivary gland lesion.
- CECT NECK PLAIN: Approximately 2.8*1.7*1.7 cms well defined lobulated soft tissue density space occupying lesion with small cystic area noted in superficial lobe of right parotid gland-suggestive of Benign Neoplasm (Pleomorphic adenoma/ Warthin's tumor)

Provisional Diagnosis: Benign Right Parotid GLAND Tumor Planned For Superficial Parotidectomy Under GA

Surgical Management –

- Under GA, Endotracheal intubation
- Infiltration around the swelling with Injection LIGNOCAINE 2% with ADRENALINE and Modified Blair incision is given

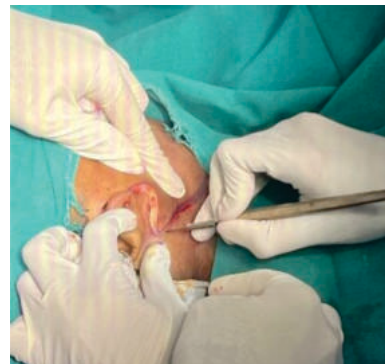


Figure Showing Modified Blair Incision in Right Parotid Region

- Skin flaps are raised which contain subcutaneous tissue superficial to parotid fascia, including Superficial Musculo-Aponeurotic System.
- Parotid is mobilised from Tragal cartilage superiorly, adjacent, sternocleidomastoid and posterior belly of digastric muscles.
- Greater Auricular nerve is preserved.
- Wide exposure of the gland superiorly to inferiorly, with gentle traction, gland is dissected off superficial to Facial nerve.



Figure Showing Exposure of the Gland



Figure Showing Dissection of the Gland

- Integrity of Facial nerve is checked with Facial nerve monitoring.
- Excised part of Parotid gland is sent for Histopathological examination.
- Corrugated Drain is placed; Haemostasis is achieved with Bipolar cautery.
- Wound is irrigated and sutured in two layers; Pressure dressing is done.



Figure Showing Excised Parotid Gland Tumor

Post-operatively patient developed Facial nerve palsy, Injection DEXAMETHASONE 8MG was given intravenously two times daily for 5 days and tapered to once daily for 5 more days.

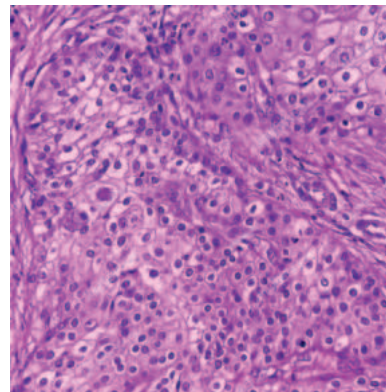
Injection CEFTRIAXONE 1g twice daily, Injection CLINDAMYCIN 600mg twice daily, are given intravenously for a period of 5 days.

Drain was removed after 3 days; pressure dressings were changed regularly.

Histopathological Report

Sections studied show a tumor composed of solid islands of neoplastic cells. Tumor is infiltrative and extends into surrounding muscle. No foci of necrosis seen. Individual cells show epidermoid cells, intermediate cells and only few vacuolated cells? Mucocytes. Cells

show pleomorphic nuclei and focal prominent nucleoli. Mitotic activity is 3-4/10HPF. No foci of perineural or vascular invasion seen in sections sent for study. Surrounding salivary gland tissue appears normal. Histological picture is that of a "MUCOEPIDERMOID CARCINOMA-HIGH GRADE".³



Histopathological Picture of Mucoepidermoid Carcinoma

Final Diagnosis- High Grade Right Mucoepidermoid Carcinoma of Right Parotid Gland.

Radiotherapy was given to the patient with a dose of 60Gy via conventional fractionation for a period of 40days.

Followed by which Facial nerve functioning is normal.

Patient was under regular follow up (1month and 6months).

DISCUSSION

- The most prevalent cancer of the salivary glands in both adults and children is mucoepidermoid carcinoma. The parotid gland accounts for about 89% of cases, with the submandibular gland coming in second at 8.4% and the sublingual gland at 0.4%.⁴
- By elevating in the subplatysmal plane, superficial parotidectomy is the primary therapy of choice for the removal of both benign and malignant parotid tumors in the superficial lobe while preserving the function of facial nerve.⁵
- In order to improve locoregional control and survival, radiation therapy (RT) to the primary site is advised in the postoperative or adjuvant setting, particularly in cases of high-grade histology, advanced disease stage, positive or close margins, perineural invasion, lymphovascular invasion, cervical lymph node metastases, or extra-glandular extension.⁶
- After parotidectomy, 10% to 65% of patients experience acute facial nerve palsy, while less than 5% experience permanent paralysis.⁷
- The diverse range of histology associated with salivary gland cancers results in a broad range of prognoses. Children and adolescents often have a better prognosis for salivary malignancies than adults because they have more distinct histology, fewer cervical metastases, and less local soft tissue invasion.
- Advanced age, high-stage disease, high-grade histology, cervical metastasis, male gender, presence of pain, involvement of the facial nerve, perineural invasion, local soft tissue invasion, positive or close margins, distant metastasis, and comorbidities are all considered negative prognostic factors for survival, regardless of the malignant subtype.
- It has been demonstrated that the 5-year survival rate for mucoepidermoid carcinoma ranges from 75% to 96%.⁸ The 10-year survival rate is roughly 53% overall.⁹

CONCLUSION

- The risk factors for salivary gland tumors should be explained to patients, and they should be advised to limit their exposure.
- Given the slow growth pattern of the disease in some cases, patients should be reminded that long-term follow-up is essential for salivary malignancies.
- Salivary cancers can have different histology and levels of severity, and they frequently need multimodal treatment that includes chemotherapy, radiotherapy, and surgery.
- A customized strategy for every patient can be achieved through close coordination and communication between the surgeons, radiation oncologists, and medical oncologists.

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