CASE REPORT

Giant Parotid Tumor

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ABSTRACT:
Malignant parotid tumors are uncommon tumors. Although pleomorphic adenoma is the commonest benign tumor of the parotid accounting for 65% of tumors but malignant tumors are also seen frequently in parotid gland. Normally these tumors are slow growing with a long history of lump in the parotid gland. The rapid growth phase in these tumors indicate malignant transformation. The involvement of facial nerve is a late symptom and denote advance stage. We are presenting a giant malignant tumor of the parotid gland measuring 22cm x 15cm in a lady of 50 years. To the best of our knowledge this is the biggest tumor reported so far in Pakistan.
KEY WORDS: malignant parotid tumor, rapid growth phase, adenoid cystic, giant long standing tumor

INTRODUCTION:

Most textbooks suggest that one in six parotid tumors are malignant. Some even quote higher figure. Tumors enlarge laterally producing a visible swelling. Malignant tumors may enlarge rapidly and facial nerve involvement is not uncommon. Carcinomas of deep lobe expand medially into the pharynx producing bulge and pushing tonsil and pharynx medially. The surgical anatomy of the parotid gland is complex, with the facial nerve growing through it dividing the gland into two unequal parts. Thus the concept of a superficial and a deep lobe is purely one of surgical anatomy. The commonest malignancy is the mucoepidermoid carcinoma followed by adenoid cystic carcinoma.

CASE REPORT:

We are presenting a case of Rashida Begum, a 50 year old female,who attended outpatient department of AbbasiShaheed Hospital with a huge mass right side of face, bleeding at places with multiple skin breeches. The patient was severelyanaemic and in pain. The history was long about 18 to 20 years. On clinical examination a giant, irregularly shaped, mulilobulated, mobile, fungating, bleeding tumor on right side of face was noted arising from parotid and hanging down onto the neck. The mass measured 22cm by 15 cm. The facial nerve was intact.

There was a previous history of surgery for a mass in right parotid area long ago. The patient had lost all the relevant record and only remembers that it was not a malignant tumor. Following that surgery, the patient remained symptom free for about ten years. Then she developed a small mass in the same area which gradually increased to this huge size in about six years.The bleeding from the mass about fourmonths ago months ago and pain about two months ago.

When the patient was seen in outpatient, she was severely anaemic with a Hb. of 2.7gms only. She was given multiple packed cell transfusions to raise the Hb. Along with high caloric diet. All other laboratory investigations were within normal limits.

C.T. scan revealed a tumor, 22cm by 15 cm, multi lobulated arising from right parotid area, involving the submandibular area, paraphryngeal space and abutting the paravertebral muscles and carotids with a fat plan in between. A large postauricular mass seen projecting from the main mass. Contrast C.T. showed enhancement showing high vascularity with large vessels entering the mass from the periphery.

Clinically the mass was mobile and not fixed to the deeper tissues. There was no intraoral extension or bulge, indicating that the tumor was arising from superficial part of the parotid. Larynx was within normal limits and there was no swallowing difficulty. The facial nerve was intact.

Multiple biopsies were taken and sent for histopathology which confirms it to a highly suspicious adenoid cystic carcinoma. As the adenoid cystic carcinoma spread through the peripheral nerves, the consent of the patient was taken for sacrifice of facial nerve. A total parotidectomy including facial nerve was done removing the skin involved with two cm safe margins.

DISCUSSION:

There is no universally agreed classification exists but overall parotid tumors can be divided into seven categories:

- Adenomas
- Carcinomas
- Non epithelial tumors
- Malignant melanoma
- Secondary tumors
- Unclassified tumors

If we look at malignant tumors, following histological types are seen in parotid gland.

1. Acinic cell carcinomas
2. Mucoepidermoid carcinomas
3. Adenoid cystic carcinomas
4. Polymorphous low grade adenocarcinomas

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5. Papillary cystadenocarcinoma
6. Mucinous adenocarcinomas
7. Carcinoma expleomorphic adenoma
8. Malignant mixed tumors
9. Squamous cell carcinomas
10. Undifferentiated carcinomas

Fig 1a: Bleeding tumor on right side of face

Fig 1b :Multi lobulated fungating tumor of parotid gland

Fig 2a: CT SCAN

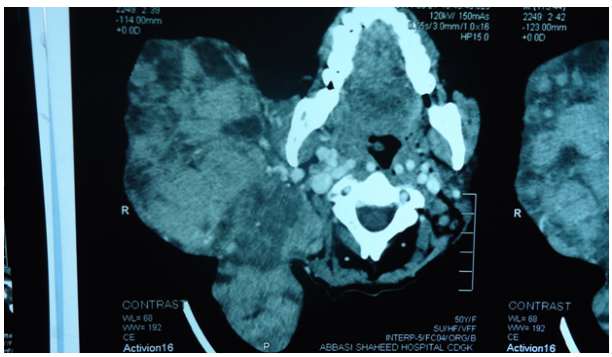
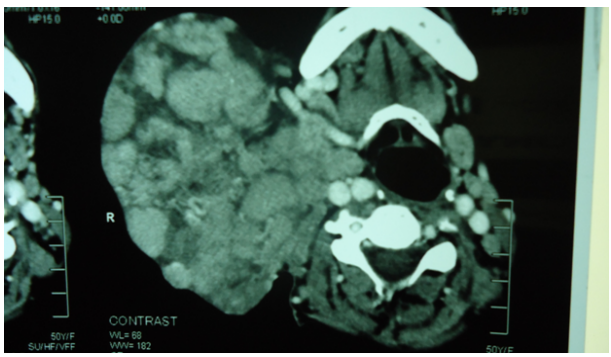


Fig 2b: CT SCAN



Acinic cell carcinoma is regarded as low grade malignancy and account for 15% of parotid malignancies. It gives the best survival rate for any salivary tumor and so facial nerve should be preserved at all cost. There is no justification for sacrifice of facial nerve in acinic cell carcinomas.

Mucoepidermoid carcinomas are the most common malignant tumors of parotid, and can be classified as low grade anf high grade. Low grades tend to be cystic while high grade tends to be solid in consistency, with areas of necrosis and heamorhage. In high grade tumors, lymph node metastasis occurs in three quarters of cases. So in high grade tumors a total parotidectomy is performed with neck dissection. Facial nerve can be spared if not involved.

Adenoid cystic is the most notorious malignancy and 41% are locally advanced at the time of presentation, with 11% having distant metastasis. This tumor is said to be never cured and the recurrence rate at 30 years is almost 100%. Lung metastasis is characteristic of this tumor. These tumors have a predisposition to invade and spread along the peripheral nerves and for this reason facial nerve is sacrificed with the tumor resection.

CONCLUSION:

Giant malignant tumors of the parotid are a rare entity and only few cases of this enormous size had been reported in world literature. The lack of proper medical facilities, lack of knowledge and negligence are the factors for such a huge tumor in third world countries.

REFERNCES:

1. Martinelli M. Martini F, Rinaldi E. Simian virus 40 sequences and expressions in human pleomorphic adenomas of parotid glands. Ann J Pathol Oct 2002; 161(4):1127-33.
2. Regis de Brito, Santos I, Kowalski CP. Multivariant analysis of risk factors for neck metastasis in surgically treated parotid carcinomas. Archive of ORL & Head and Neck Surgery 2001;127:56-60.
3 Terhaard CH,Lubsen H, Tweel V. Salivary gland carcinoma: Independent prognostic factors for locoregional control, distant metastases, and overall

survival: results of the Dutch head and neck oncology cooperative group. Head Neck 2004;26 (8):681-92.
4. Lima RA, Tavares MR, Dias FL. Clinical prognostic factorsin malignant parotid gland tumors. Otolaryngol Head Neck Surgery 2005;133 (5):702-8.
5. Maxwell EL, Hall FT, Freeman JL. Recurrent Pleomorphic adenoma of the parotid gland. J Otolaryngol 2004;33(3):181-4.
6. Airoldi M, Cortesina G, Giordano C. Update and perspectives on nonsurgical treatment of salivary gland malignancies. ActaOtolaryngolItal 2003; 23(5):368-76.
7. Bragg CM, Conway J, Robinson MH. The role of intensity modulated radiotherapy in the treatment of malignant tumors. Int J Radiat Oncol BiolPhys 2002; 52(3):729-38.
8. Buchholz TA, Shimotakahara , EA, jr, Griffen TW,Laramore GE. Neutron radiotherapy for adenoid cystic carcinoma of the head and neck. Arch Otolaryngol Head Neck Surg 1993;119 (7):747-52.
9. Hanna E, Suen JY. Malignant tumors of the salivary glands 4th ed. Philadelphia,PA: Saunders;2003.
10. Mendenhall WM, Mendenhall CM, Werning JW, Malyapa RS, Mendenhall NP. Salivary gland pleomorphic adenoma.Am J Clin Oncol. 2008 Feb;31(1):95-9. doi:10.1097/COC. 0b013e3181595ae0. Department of Radiation Oncology, University of Florida College of Medicine, Gainesville, FL, USA. mendwm@shands.ufl.edu