

Metastatic Malignant Phyllodes Tumour: An Interesting Presentation as a Parotid Swelling

Sivaram P.*, Jayan C.**, Sulfekar M. S.***, Rahul M.*

*Resident, **Additional Professor, ***Associate Professor, Department of General Surgery, Government Medical College Thiruvananthapuram, Kerala, India.

Abstract

The phyllodes tumour is a rare fibroepithelial lesion which represents 0.3 - 1% of all breast neoplasms. The peak incidence of this tumour is between 35 and 55 years of age. Most phyllodes tumours are benign. In around 10-20% of all phyllodes tumours a malignant potential is identified. Lung is the most common site of metastasis. We report the case of a 55 year old lady presenting with bone metastasis in parotid region which was diagnosed initially by FNACs as Pleomorphic Adenoma of the Parotid. Continued investigations proved it to be metastasis of a Malignant Phyllodes Tumour. This report will add one more case to the relatively small database of metastatic malignant phyllodes tumour cases and illustrate the continuing importance of clinical examination to reach the correct diagnosis.

Keywords: Phyllodes Tumour; Malignant Phyllodes Tumour; Metastatic Phyllodes Tumour; Parotid Swelling.

Case Report

A 55 year old lady presented at the outpatient department with a painless swelling in her left parotid region which she noticed first about 7 months back. This slowly enlarging swelling was initially painful. She does not recall having difficulty in opening mouth or any deviation of angle of mouth. Her local physician had ordered an FNAC, the report of which was Pleomorphic Adenoma. She had

undergone two surgical operations in the past total abdominal hysterectomy six years back and simple mastectomy on the right side one and a half years back. Hysterectomy was for Fibroid Uterus. She did not go for the follow up after mastectomy and hence further details were not available at the time of initial examination. She was on regular analgesics from a local hospital for low back pain. General examination was unremarkable except for the antalgic gait due to the hip pain and the healed scars of previous operations, viz a Pfannenstiel incision scar and a right mastectomy scar. On the left parotid region there was a swelling of size 5x4 cm below and slightly in front of lobule of ear, raising the ear lobule. The skin over swelling was normal. On palpation it was bony hard with smooth surface. All the borders were well defined. There were no features of facial nerve involvement or restriction of jaw movements. Cervical lymph nodes were not enlarged. Hip joint movements were restricted by pain. Lumbosacral spine was tender. The hardness of the swelling prompted another FNAC while efforts were made to trace histopathology reports of previous operations. Report came as 'Cytology findings are that of a benign neoplasm: Pleomorphic Adenoma to be considered'. An ultrasonography of the left parotid region was done because of easier availability, also reported it as a pleomorphic adenoma. An X-ray Pelvis was done in view of low back pain showed up multiple lytic lesions on the sacrum, L5 vertebrae and head and neck of right femur (Fig.1). Chest X-ray was normal. This prompted a CT which showed a 'Heterogeneous lytic lesion involving ramus of left mandible, with extension into masticator space, Left parotid gland normal and displaced posteriorly.' (Fig.2). We repeated the FNAC again but under ultrasonographic guidance, and the report was "suggestive of metastasis from a spindle cell neoplasm". As a part of metastatic work-up an ultrasonography of abdomen was done which showed two small

Corresponding Author: Sivaram P., Resident, Department of General Surgery, Government Medical College Thiruvananthapuram, Kerala, India.

E-mail: sivrm.p@gmail.com

hypoechoic lesions in segment five of liver, possibly metastasis. In the meantime the details of previous

simple mastectomy were traced. A review of histopathology slides was reported as Phyllodes tumour.

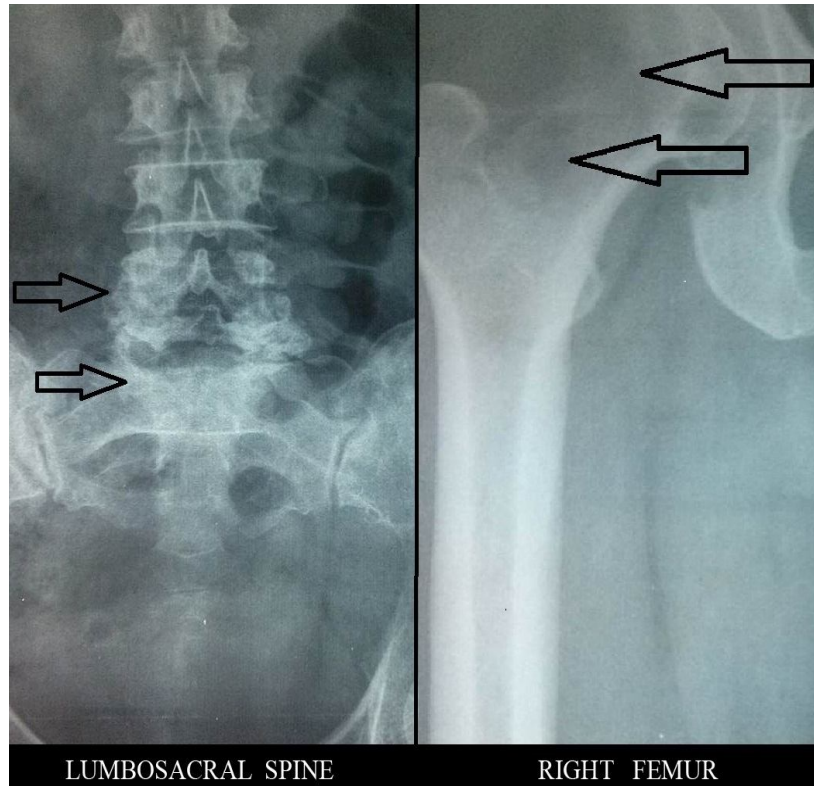


Fig. 1: Radiograph of lumbosacral spine and right femur showing lytic lesions on the sacrum, L5 vertebrae, head and neck of femur.

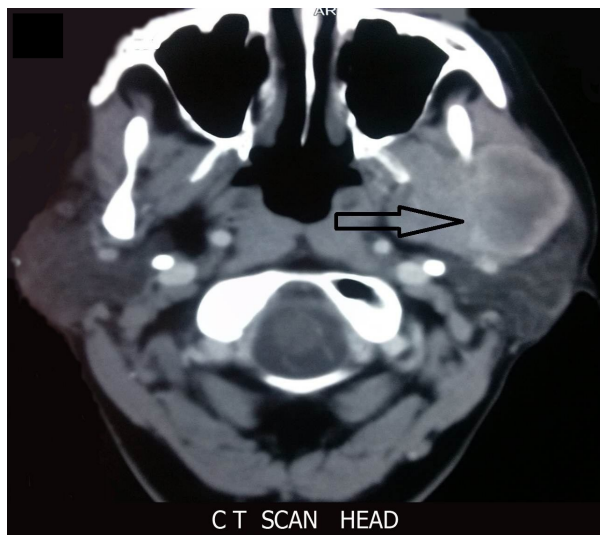


Fig. 2: CT head revealed a heterogeneous lytic lesion involving ramus of left mandible, with extension into masticator space.

Discussion

Phyllodes Tumour was first described by Johannes Müller in 1838. He coined the term cystosarcoma phyllodes. The tumour is classified on

the basis of histological grade as benign, intermediate or malignant [1]. A large series from the M.D. Anderson Cancer Centre reported the incidence of each as benign (58%), intermediate (12%), and malignant (30%) [2]. Grading is based on the frequency of observed mitoses, tumour margin characteristics, the stromal cellularity and the degree of atypia. The risk of metastasis increases with increasing tumour grade. Malignant phyllodes tumours behave like sarcomas and can develop blood-borne metastases. Approximately 10% of patients with phyllodes tumours develop distant metastases and this can go up to 20% in patients with histologically malignant tumours [3]. The commonest sites for distant metastases are the lung, bone, and abdominal viscera [4]. Only a few cases of phyllodes tumour metastases to bone have been previously reported, including lesions in the skull, mandible, scapula, spine, rib, iliac bone, sacrum, femur and phalanx [5-8]. Most distant metastases develop without evidence of local recurrence or lymph nodal involvement [4] as in this case. The risk of metastatic disease does not appear to be influenced by the extent of the initial surgery [4]. Metastatic phyllodes tumours have a poor prognosis and no long term survival has been reported. Suzuki-

Uematsu et al. reviewed 15 cases of Malignant Phyllodes Tumours and reported a five year survival rate following primary surgery of 10%. Following detection of metastasis only 11% survived for 2.2 years. The patient was sent for palliative radiations of bone metastasis. Presenting to a referral center with an FNAC result can track an unsuspecting surgeon's mind along the diagnosis suggested by the report. The region and the cells of phyllodes tumour resulted in a second cytologist interpreting the case as pleomorphic adenoma. The easy availability of CT scan or the practice of routinely doing it would have limited the value of this case only as one belonging to the rare bone metastasis of Malignant Phyllodes. But the sequence of events and lack of complete clinical details made it a test of clinical skills as a bonus. In centres where routine CT scan is not part of protocol, a good clinical examination is still the guardian angel of surgeons.

References

1. Tse G.M.K, Niu Y, Shi H. Phyllodestumor of the breast: an update. *Breast Cancer*, 2010; 17(5): 29-34.
2. Chaney A.W, Pollack A, Mcneese M, Zagers K, Pisters P, Pollock R.E , et al. Primary treatment of cystosarcoma phyllodes of the breast. *Cancer*, 2000; 89(7): 1502-1511.
3. Moffat CJC, Pinder SE, Dixon AR, et al. Phyllodes tumour of the breast: a clinicopathological review of the thirty-two cases. *Histopathology*, 1995; 27: 205-18.
4. Staren ED, Lynch G, Boyle C, Witt TR, Bines SD. Malignantcystosarcomaphyllodes. *Am Surg*. 1994; 60: 583-5.
5. Abemayor E, Nast CC, Kessler DJ. Cystosarcoma phyllodes metastatic to the mandible. *J SurgOncol*. 1988; 39: 235-240.
6. Jones AA, Rizzolo SJ, Cotler JM, Star AM, Slemmer R. Metastatic cystosarcoma phyllodes associated with paraplegia: an uncommon complication of an uncommon tumor. *J Spinal Disord* 1993; 6: 71- 75.
7. Goldschmidt RA, Resnik CS, Mills AS, Walsh JW (1984) Case report 266. Diagnosis: metastasis to right ilium from cystosarcoma phylloides of breast. *Skeletal Radiol* 1984; 11: 213-215.
8. Patel MR, Anand VS, Desai SS. Metastatic tumor of the hand from malignant cystosarcomaphylloides of the breast. A case report. *Orthopedics* 1985; 8: 373-375.