



A Huge Benign Phyllodes Tumour of the Breast: a Rare Entity

Jeetendar Paryani¹

Received: 23 September 2018 / Accepted: 7 March 2019 / Published online: 27 March 2019
© Indian Association of Surgical Oncology 2019

Introduction

Phyllodes tumours are unusual neoplasms that consist of less than 1% of all breast tumours. These are special tumours that occur exclusively in the female breast [1–4]. The term cystosarcoma phyllodes labelled by Johannes Muller for these tumours is a misnomer as they are rarely cystic and usually have a benign clinical course [3].

These tumours demonstrate a wide spectrum and could be classified as benign, borderline and malignant. While benign tumours are more frequent, malignant phyllodes tumour of the breast is an uncommon rare entity occurring mostly in middle-aged women [4–6]. Surgery is the usually required treatment [1–9]. Given its infrequent description in literature, guidelines regarding optimal management are based on small-scale retrospective clinical trials or case reports [1–3].

Few case reports have described the occurrence of giant phyllodes tumour, which is phyllodes tumour with a size of greater than 10 cm [5–10]. We describe here a huge phyllodes tumour that we managed at our centre. We believe this tumour to be one of the largest reported in literature.

Case Report

A 50-year-old female presented with rapidly enlarging left lateral chest wall swelling since 6 months (Fig. 1). The swelling was accompanied with dull aching pain which persisted despite oral medications. There was a history of weakness and anorexia since 1 month.

There was a presence of pallor. The rest of the general examination was within normal limits.

On local examination, there was a huge left breast swelling measuring 61 × 57 × 32 cm, with variable consistency smooth

surface, well-defined margins and dilated veins over it with fixity to the skin.

Imaging was done using CECT of the local part with thorax which was suggestive of 62.5 × 55 × 34 cm tumour over the left chest wall in subcutaneous plane. No invasion into the chest wall was noted. Lungs and intrathoracic structure were normal with no evidence of metastasis.

Core needle biopsy of the swelling suggests fascicular pseudoangiomatous stromal hyperplasia or phyllodes tumour with low mitotic rate.

Patients received preoperative blood transfusion.

After adequate preoperative preparation and optimization, the patient underwent wide local excision under general anaesthesia (Fig. 2).

After the resection, the defect could be closed primarily with negative suction drain within (Fig. 2).

Postoperative period was uneventful and patient was discharged.

Final histopathological report revealed 58 × 53 × 45 cm well-encapsulated tumour grossly having solid cystic areas with clear resection margins. Pathological evaluation revealed mild stromal cellularity and minimal atypia with areas of necrosis in between. Low rate of mitosis was noted (3–4 per high power field). On complete examination gross and microscopic, the final impression was that of benign phyllodes tumour of the breast.

In routine postoperative follow-up after 8 months, the patient was healthy with no complications.

Discussion

The World Health Organization differentiates phyllodes tumours into benign, borderline and malignant subgroups depending upon various histopathological characteristics. A benign phyllodes tumour displays mildly increased stromal cellularity and minimal nuclear atypia. Low mitotic rate ($\leq 4/10$ high-power fields) and absence of stromal overgrowth are histological signatures of benign phyllodes tumour [5]. In the other side of the spectrum, a malignant phyllodes tumour

✉ Jeetendar Paryani
paryani.jeetu@gmail.com

¹ Shalby Hospital Jabalpur, Jabalpur, India

Fig. 1 Preoperative pictures of the patient showing huge chest wall mass



may show marked stromal cellularity and atypia. High mitotic activity of at least 10/10 HPFs and stromal overgrowth are often diagnostic [6]. Primary breast sarcoma and metaplastic breast carcinoma may show similar histological features. Immunohistochemistry may be required to clinch the diagnosis in doubtful cases [7].

A rapidly growing painless breast mass is the most common presentation [6, 7]. Axillary lymph node enlargement may be observed in 20% of the patients though actual axillary node involvement in disease is rare. Axillary node dissection is not a part of the surgical treatment of the disease [1–5].

Wide local excision with margins greater than 1 cm is the preferred primary treatment [1–4]. Mastectomy should be

Fig. 2 Intraoperative pictures and specimen





Fig. 3 Closure

considered in recurrent tumours, especially of the malignant histotype [1, 4–9].

Few case reports have described the occurrence of giant phyllodes tumour, which is phyllodes tumour with a size of greater than 10 cm. Sizes described are from 15 to 50 cm. The tumour described here is one of the largest reported in the literature.

Axillary lymph node may be performed due to the presence of enlarged axillary nodes but usually come up negative on final histopathology.

Wound could be closed primarily as in our case or could be covered with a latissimus dorsi flap or with a split thickness graft (Fig. 3).

Adjuvant treatment of giant phyllodes tumour given varies in available literature. For borderline or benign phyllodes, no adjuvant treatment was given [10, 11]. In the case described by Islam et al., low-grade malignant phyllodes was not given any adjuvant treatment [7]. Other case reports of malignant phyllodes tumour patients received both adjuvant chemotherapy and radiotherapy [1, 8, 9].

References

1. Paryani J, Gupta S, Chaturvedi A, Kumar V, Akhtar N, Agarwal P, Suryavanshi P, Pawar S (2017) A giant malignant phyllodes tumour of the breast: a rare entity. *Indian J Gynecol Oncol* 15. <https://doi.org/10.1007/s40944-017-0122-4>
2. Demian GA et al (2016) Phyllodes tumours of the breast: analysis of 35 cases from a single institution. *J Egypt Natl Canc Inst*
3. Mallick et al (2016) Malignant and borderline phyllodes tumour of breast treated with a multi-modality approach in a tertiary cancer care centre in North India. *South Asian J Cancer*
4. Narayanakar RP, Gangaiah DM, Althaf S, Dev K, Kurpad V, Gurawalia J (2015) Cystosarcoma phyllodes: pathological enigma: a retrospective review of 162 cases. *Indian J Cancer* 52: 365–368
5. Tan BY, Acs G, Apple SK et al (2016) Phyllodes tumours of the breast: a consensus review. *Histopathology* 68(1):5–21. <https://doi.org/10.1111/his.12876>
6. Liu M, Yang S, Liu B et al (2016) Giant malignant phyllodes tumour of the breast: a rare case report and literature review. *Oncol Lett* 12(1):121–124. <https://doi.org/10.3892/ol.2016.4583>
7. Islam S, Shah J, Harnarayan P, Naraynsingh V (2016) The largest and neglected giant phyllodes tumour of the breast—a case report and literature review. *Int J Surg Case Rep* 26:96–100. <https://doi.org/10.1016/j.ijscr.2016.07.022>
8. Krishnamoorthy R, Savasere T, Prabhuswamy VK, Babu R, Shivaswamy S (2014) Giant malignant phyllodes tumour of breast. *Case Rep Oncol Med* 2014:956856. <https://doi.org/10.1155/2014/956856>
9. Testori A, Meroni S, Errico V, Travaglini R, Voulaz E, Alloisio M (2015) Huge malignant phyllodes breast tumour: a real entity in a new era of early breast cancer. *World J Surg Oncol* 13:81. <https://doi.org/10.1186/s12957-015-0508-7>
10. Kumar T, Patel MD, Bhargavan R, Kumar P, Patel MH, Kothari K, Brahmabhatt B (2011) Largest phyllodes tumor- case report and brief review article. *Indian J Surg Oncol* 2(2):141–144
11. Sbeih MA et al (2015) A giant phyllodes tumour causing ulceration and severe breast disfigurement: case report and review of giant phyllodes. *J Surg Case Rep*:1–4

Publisher's Note Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.