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Case Report of Giant Phyllodes

Authors

Mahendra S. Navare, Priya Ahire, Tanvi M. Shah*, Rajashri Kelkar

Grant Medical College & Sir JJ Group of hospitals, Mumbai

*Corresponding Author

Dr Tanvi M Shah

107, Hilla towers, A- wing, Dr SS Rao road, Lalbaug, Mumbai 400012, India Mob: 9967215979. Email: *drtmshahgsite2512@gmail.com*

Abstract

Phyllodes tumours are rare breast tumours. These fibro-epithelial neoplasms are classified as benign, borderline & malignant based on stromal & cellular patterns, but a reliable classification is challenging. The diagnosis is based on core needle biopsy. Treatment of choice is surgical excision with negative margins. We report the case of a giant phyllodes tumour weighing 4kg that was successfully managed with surgical excision.

Keywords: giant phyllodes.

Introduction

Phyllodes tumours of the breast are rare tumours globally accounting for 0.3 to 1% of all breast tumours & 2.5% of all fibroepithelial tumours of the breast^[1]. They commonly occur in women 35-55 years of age (median age- 45 years)^[2].

Phyllodes are circumscribed biphasic fibroepithelial neoplasms with epithelial & stromal components, the latter of which represents the neoplastic process. They are classified as per the WHO classification schema as benign, borderline or malignant based on stromal patterns of cellularity, nuclear atypia, mitotic activity, heterologous stromal differentiation, stromal hypercellularity, cellular pleomorphism & tumour margin appearance^[2]. However, absent clear defining boundaries for each of these parameters challenging^[3]. classification makes reliable

Majority (up to 60%) of these tumours are benign^[2]. In one series, 6.2% of the tumors were malignant^[4], however due to the challenges in accurate classification the exact incidence is not known. We report a case of a giant phyllodes tumour presenting as a fungating mass.

Case Presentation

A 32 year old patient came with a lump in right breast since 10 years. The lump gradually progressed in size over 10 years & had ulcerated through the skin since 2 months. There was history of serosanguinous nipple discharge since 2 months. On examination the patient had an ECOG score of 0. She had a 30 x 25 x 20cm fungating lump in the right breast, firm in consistency, nontender, with ulceration of the overlying skin but not fixed to the chest wall. There was destruction

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of nipple-areola complex raising a clinical suspicion of malignant neoplasm. There was no axillary, cervical or supra-clavicular lymphadenopathy.



Core biopsy was suggestive of phyllodes. Metastatic workup including an x ray chest & ultrasonography of abdomen & pelvis were performed with the clinical suspicion of malignancy, & was negative.

The patient underwent wide excision of the lump. Skin flaps were raised superiorly upto the clavicle & inferiorly upto the rectus sheath. Wide excision of the lump was done, skin flap edges were freshened to exclude all ulcerated area & the resulting defect could be closed primarily without tension. Final histopathology report confirmed a benign phyllodes tumour. The patient has been followed up with regular clinical examination & annual mammography since 5 years & has not shown any recurrence.



Discussion

Phyllodes tumour was first described by Muller in 1838 & since then has presented a diagnostic & treatment dilemma. Classically they were named as cystosarcoma phyllodes due to their fleshy appearance. The term however is a misnomer as these tumours are usually benign. The reported incidence is around 0.3-1% ^[1, 5]. The median age of presentation is around 45 years^[1,6,7]. The average size reported is 5-10cm^[8,9]. 20% of these tumours grow to size larger than 10cm, the arbitrary cut-off point for designation as a giant tumour. These tumours can attain huge sizes of upto 40cm.

There is no pathognomonic clinical or radiological feature of these tumours. Giant phyllodes can mimic breast carcinomas clinically. FNAC has been proposed as a method to improve pre-operative diagnosis, however the results are not promising. In one study the diagnostic yield of FNAC was found to be only 4 in 30 cases^[10] & other studies have proved it to be non-diagnostic in most cases^[11]. The diagnostic difficulty is compounded by the fact that they share many cytological features with fibroadenomas^[12,13]. Core biopsies have been shown to have better diagnostic yield & has been suggested as the diagnostic procedure of choice by several authors ^[14,15].

Histologically phyllodes tumours are divided into benign, borderline & malignant. Histologic appearance however, may not co-relate with clinical behaviour ^[16,17,18,19] as even benign tumours have a high risk of recurrence & both borderline & malignant tumours are capable of metastasizing.

Surgical management of phyllodes has also been a source of debate. Some authors argued in favour of simple mastectomy due to risk of local recurrence after more conservative procedures ^[20,21,22,23], however studies have shown no difference in disease free or overall survival even in malignant phyllodes, despite a risk of recurrence^[24]. The overall & disease free survival reported is variable (> 80% in most series)^[19, 25, 26]. Local recurrence rates after wide excision or mastectomy have been variably reported between 8-15% ^[19,25,26,27]. Distant metastasis have been reported between 5-13% ^[27,19]. The rate of

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recurrence & metastasis depends on aggressive pathologic features, including large tumor size (>or=7.0 cm), infiltrative borders, marked stromal overgrowth, marked stromal cellularity, high mitotic count, and necrosis.^[6]. The extent of surgical resection did not affect disease free survival^[28]. Most experts currently advocate wide local excision with 1cm margin, mastectomy being reserved for recurrent disease.

Conclusions

Phyllodes tumours are rare tumours, usually presenting in patients around 45 years of age. They are histologically classified as benign, borderline & malignant but due to lack of pathognomonic clinical, radiological & cytological picture pose a diagnostic & treatment dilemma. Core biopsy is the pre-operative diagnostic procedure of choice. The treatment of choice is surgical excision with negative margins mastectomy. The prognosis is usually or favourable, although there is a significant risk of recurrence. Our case highlights the facts that these tumours can assume huge size, can mimic carcinomas clinically & pose a diagnostic dilemma, core biopsy is the investigation of choice & these tumours can managed successfully with wide local excision.

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