Section: General Surgery

Case Series

PHYLLODES TUMOR OF THE BREAST: A RETROSPECTIVE CASE SERIES

S.P. Gayathre[1], K. Lokeshwari[2], R. Abhinash Reddy[3]

[1]Professor and Head, Department of General Surgery, Govt. Stanley Medical College, Chennai, India.
[2]Assistant Professor, Department of General Surgery, Govt. Stanley Medical College, Chennai, India.
[3]Junior Resident, Department of General Surgery, Govt. Stanley Medical College, Chennai, India.

Received : 11/05/2025
Received in revised form : 03/07/2025
Accepted : 24/07/2025

Keywords:
Phyllodes tumor, fibroepithelial neoplasm, breast mass, recurrence, wide local excision, and histopathology.

Corresponding Author:
Dr. R.Abhinash Reddy,
Email: reddyabhinash0@gmail.com

DOI: 10.47009/jamp.2025.7.4.195

Source of Support: Nil,
Conflict of Interest: None declared

Int J Acad Med Pharm
2025; 7 (4); 1023-1028

ABSTRACT

Background: Phyllodes tumors represent an infrequent subset of fibroepithelial neoplasms within the breast, comprising less than 1% of all breast neoplasms. These lesions manifest a continuum of behavior, classified as benign, borderline, or malignant. Their histologic similarities to typical fibroadenoma coupled with a documented propensity both for local recurrence and, infrequently, for hematogenous spread underscores the necessity for accurate, prompt diagnosis and stringent surgical intervention. This investigation aimed to delineate the clinical spectrum, imaging signatures, histopathological criteria, surgical approaches, and clinical outcomes of patients harboring phyllodes tumors, with an analytical emphasis upon those presentations that demonstrated atypical or aggressive features. **Materials and Methods:** This retrospective case series encompassed eight women with histologically authenticated phyllodes tumors of the breast, all of whom underwent treatment at a single tertiary referral institution between January 2023 and March 2025. Data were systematically abstracted from operative registries, histopathological archives, imaging databases, and comprehensive follow-up documentation. Tumoral classification into benign, borderline, and malignant subgroups was guided by World Health Organization criteria. Analytic focus was directed to patient age, maximal tumoral dimension, histological subtype, surgical technique employed, and incidence of recurrence during the subsequent follow-up interval. **Result:** Within this cohort of eight patients, three tumors were designated as benign, three as borderline, and two as malignant. All patients presented with a discretely expanding, non-tender breast mass. Tumor dimensions spanned 3.2 cm to 10.4 cm. Surgical resection comprised wide local excision in six instances; mastectomy was indicated in the two malignant tumors owing to excessive size or dermal involvement. Tumors categorized as borderline or malignant revealed a pronounced mitotic index and pronounced cellular dysplasia. Two patients were subsequently administered adjuvant treatment, and a single case manifested an early local recurrence. **Conclusion:** Both the rapid enlargement of a breast mass and the distinct histopathological features of phyllodes tumors necessitate an alert clinical perspective. Complete surgical resection with generous margins remains the definitive therapeutic approach. Histological classification further informs prognosis and the necessity of adjunctive care. Continuous clinical surveillance is essential to identify and manage recurrences at the earliest stage.

INTRODUCTION

Phyllodes tumors constitute a distinctive group of fibroepithelial breast lesions, accounting for less than 1% of all mammary neoplasms, and exhibit considerable heterogeneity in histopathology and clinical course, ranging from benign to outright malignant forms. Clinically, these tumors may simulate fibroadenomas but possess a markedly different propensity for recurrence and aggressive behavior.[1] Although the benign variant typically follows a benign clinical course, borderline and malignant forms may exhibit local aggressiveness and, in a subset of cases, metastasize.[2]

The classification and nomenclature of phyllodes tumors have matured in tandem with advancing histopathological understanding. Classically, the key histological parameters—stromal cellularity, mitotic

ISSN (O): 2687-5365; ISSN (P): 2753-6556

count, and the nature of surgical margins—are employed to establish a grading system.[3] Damak et al. demonstrated that lesion size and the presence of infiltrative margins remained independent, statistically significant predictors of recurrence, reinforcing the necessity of achieving a surgical resection with generous normal breast tissue margins.[4] A recent European multi-centre analysis suggested that, for borderline and malignant phyllodes tumors that are advanced or for which surgery is not feasible, systemic therapy may provide a palliative benefit, albeit with limited impact on long-term control.[5]

Histological diagnosis primarily relies on core needle biopsy, but the differential diagnosis becomes difficult when the specimen is small, and surgical excision is ultimately required for definitive assessment.[6] Yılmaz et al. caution that all imaging modalities, including ultrasound, mammography, and MRI, possess limited specificity, placing histopathology as the gold-standard confirmatory assay.[7] Spitaleri et al. quantified the recurrence incidence among borderline and malignant lesions as being disproportionately high, even when wide surgical margins are reported, underscoring the necessity for ongoing surveillance in these subgroups.[8]

In a retrospective analysis of 150 subjects, Ramakant and colleagues documented persistent difficulties in securing negative surgical margins, which they attributed to increased tumor dimensions and heightened growth velocity.[9] Alkushi and his team observed that while local recurrence and distant metastatic spread remain comparatively rare, they exert considerable influence on the clinical course and prognosis of malignant tumor variants.[10]

These findings underscore the necessity of tailoring treatment algorithms for phyllodes tumors according to histological grade, the adequacy of surgical margins, and the projected likelihood of recurrence.

MATERIALS AND METHODS

This retrospective case series was performed within the Department of General Surgery at a tertiary care referral center in India. The observation period spanned 27 months, from January 2023 to March 2025, and examined eight female patients with histologically confirmed phyllodes tumors of the breast. Prior to data acquisition, approval was secured from the Institutional Ethics Committee.

Case identification relied upon surgical histopathology archives and digital medical records. Eligible patients were those who: (1) were female of any age; (2) had a diagnosis of phyllodes tumor substantiated by histopathology following surgical resection; and (3) had comprehensive clinical, radiological, surgical, and histological documentation. Patients presenting with tumor recurrence or with incomplete clinical datasets were excluded from the review.

Data elements extracted comprised demographic information, clinical presentation, tumor dimensions, and the duration of symptoms. Imaging, including ultrasound and mammography, was assessed if recorded. Surgical details were classified as either wide local excision or mastectomy, and the status of resection margins was recorded. Tumors were categorized as benign, borderline, or malignant according to the WHO histological classification, considering stromal cellularity, degree of atypia, mitotic index, margin features, and the presence of necrosis.

Histopathological slides were re-evaluated to confirm the diagnosis and to identify the tumor subtype.

Subsequent details were obtained through outpatient records in order to gauge both recurrence and complications subsequent to surgery. Patients were observed for durations ranging from 3 to 18 months.

The primary aim of this study was to delineate both the clinical evolution and the histopathological characteristics of phyllodes tumors, with supplemental focus on the surgical outcomes and recurrence frequencies, especially in instances exhibiting atypical clinical features.

CASE REPORT 1

Clinical Presentation: A 42-year-old woman came to the clinic with a painless, slowly enlarging mass in the upper outer quadrant of the left breast that had developed over the preceding four months. There was no reported nipple discharge, skin change, or antecedent trauma.

Imaging Findings: Breast ultrasound demonstrated a sizable, circumscribed, heterogeneous lesion measuring 6.8 by 5.2 cm, noteworthy for internal cleft-like structures and a subtle enhancement of posterior acoustic transmission.

Biochemical Analysis: Standard hematologic and biochemical panels, in addition to serum CA 15-3 determinations, yielded results either within normal limits or undetectable in the context of a neoplastic process.

Histopathology: A core needle biopsy revealed a fibroepithelial neoplasm. The subsequent specimen from wide local excision was diagnosed as a borderline phyllodes tumor, showing moderate stromal cellularity, regions of overgrowth, and a mitotic rate of 4 mitoses per 10 high-power fields.

Current Status: The patient underwent wide local excision with 1.5 cm of negative margins. At the 12-month follow-up, there are no signs of local recurrence

CLINICAL REPORT 2

Clinical Presentation: A 65-year-old postmenopausal female patient presented with a breast mass that had tripled in size over an interval of

ISSN (O): 2687-5365; ISSN (P): 2753-6556

2 months; examination revealed skin ulceration and intermittent serous drainage from the site.

Imaging Findings: Magnetic resonance imaging demonstrated a 10.4 × 8.1 cm lobulated lesion characterized by internal cystic necrosis and moderate heterogenous enhancement, localized to the upper and central quadrants of the breast.

Biochemical Analysis: Laboratory investigations disclosed mild normocytic anemia (hemoglobin 10.4 g/dL); blood cultures and liver function tests were within the normal range, and serum tumor markers were negative for metastatic disease.

Histopathology: Final examination of the total mastectomy specimen identified a malignant phyllodes tumor with pronounced stromal cellular atypia, a mitotic index exceeding 10 mitotic figures per 10 high-power fields, and evidence of infiltrating borders.

Current Status: The patient completed a course of adjuvant radiotherapy to the chest wall. At the 9-month follow-up examination, clinical and imaging studies revealed no evidence of local or distant recurrence.

Figure 1: Preoperative clinical photograph showing a massive ulcerated and necrotic malignant phyllodes tumor of the right breast with overlying skin breakdown and hemorrhagic areas, consistent with aggressive tumor progression (Case 2).

CASE REPORT 3

Clinical Presentation: A 31-year-old female was evaluated for a discrete, firm, mobile, and asymptomatic mass in the left breast, which had slowly enlarged over three months. The clinical history was unremarkable for nipple discharge, constitutional symptoms, or hereditary breast cancer syndrome.

Imaging Findings: High-resolution breast ultrasonography demonstrated a well-circumscribed, hypoechoic mass, measuring 4.5 × 3.9 cm in the upper inner breast quadrant. The ultrasound exhibited smooth contours and showed moderate internal vascularity on Doppler interrogation.

Biochemical Analysis: Routine hematological and biochemical investigations, encompassing complete blood count and liver function tests, yielded normal reference values.

Histopathology: The excisional biopsy showed histological features consistent with a benign phyllodes tumor, distinguished by a sparsely cellular stroma, the complete absence of nuclear atypia, and a mitotic index of fewer than 2 mitotic figures per 10 high-power fields.

Current Status: Histopathological examination confirmed clear surgical margins. The patient remains asymptomatic with local recurrence at 15 months of postoperative follow-up

CASE REPORT 4

Clinical Presentation: A 54-year-old woman with a 10-year history of diabetes mellitus was referred for evaluation of a recurrent right breast mass that developed one year after complete excision of a lesion previously classified as a fibroadenoma.

Imaging Findings: A subsequent mammogram revealed a 5.8 × 4.6-cm oval mass in the lower inner quadrant of the breast; the lesion exhibited partly circumscribed margins and heterogeneous radiodensity.

Biochemical Analysis: Routine laboratory evaluations were within normal limits, with the exception of a mildly elevated erythrocyte sedimentation rate of 38 mm/hr.

Histopathology: Histological examination of the re-excised tissue revealed a borderline phyllodes tumor characterized by moderate stromal atypia, focal stromal overgrowth, and a mitotic rate of 6 mitoses per 10 high-power fields.

Current Status: The patient subsequently underwent a wider excision, and there has been no evidence of local recurrence during an 11-month postoperative follow-up.

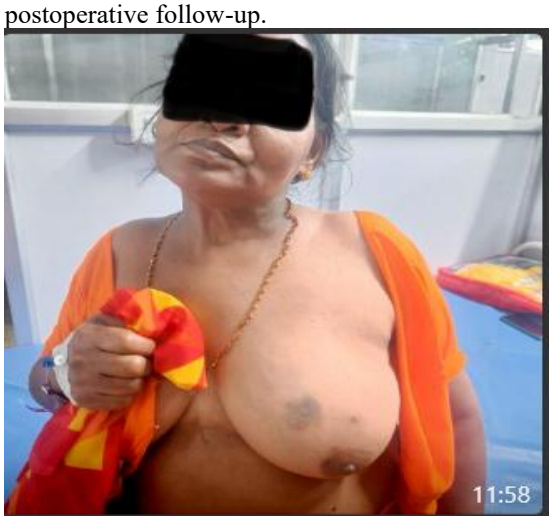

Figure 2: Clinical photograph showing a recurrent Left breast mass in a middle-aged woman (Case 4) with overlying skin stretching and mild ecchymosis, indicative of underlying borderline phyllodes tumor.

ISSN (O): 2687-5365; ISSN (P): 2753-6556

CASE REPORT 5

Clinical Presentation: A 38-year-old female presented with a progressively enlarging, nontender mass in the left breast, first detected six months prior. She denied any prior trauma, nipple discharge, or systemic symptoms.
Imaging Findings: Ultrasonography demonstrated a sharply circumscribed, solid lesion measuring 3.2 × 2.5 cm with a smooth margin and uniform echogenicity. The lesion received a BI-RADS assessment of 3.
Biochemical Analysis: Complete blood count, erythrocyte sedimentation rate, and serum electrolytes were all within normal limits.
Histopathology: Following wide local excision, histopathological evaluation revealed a benign phyllodes tumor. Findings included slightly elevated stromal cellularity, absence of nuclear atypia, and a mitotic count of fewer than 2 mitoses per 10 high-power fields.
Current Status: The patient was counselled on routine follow-up. At the 8 months following excision, no signs of local recurrence have been detected.

CASE REPORT 6

Clinical Presentation: A 59-year-old woman presented with a painful, rapidly enlarging mass in the left breast that had appeared over the prior 2 weeks, associated with erythema and marked tenderness of the overlying skin.

Figure 3: Preoperative photograph of a large, tense, and shiny malignant phyllodes tumor of the left breast (Case 6), showing stretched overlying skin without ulceration but with marked enlargement and impending necrosis.

Imaging Findings: Breast MRI revealed a lobulated dominant mass measuring 9.6 × 7.3 cm, exhibiting both hemorrhagic foci and extensive central necrosis.
Biochemical Analysis: Inflammatory markers showed a mild elevation of C-reactive protein; routine biochemical and hematological assays were otherwise within normal limits.
Histopathology: The post-mastectomy histological examination disclosed a malignant phyllodes tumor characterized by significant stromal overgrowth, extensive areas of necrosis, a mitotic index greater than 15 mitoses per 10 high-power fields, and infiltrative tumor borders.
Current Status: The patient has concluded a course of adjuvant chemotherapy and continues on a protocol of imaging surveillance at 3-month intervals. There have been no documented local or distant recurrences thus far.

CASE REPORT 7

Clinical Presentation: A healthy 50-year-old woman had occasional discomfort and pain in the left breast and a recently discovered, palpable, elastic mass of 4 cm. The lesion was freely mobile and had been enlarging steadily over the last 10 months.
Imaging Findings: Mammography demonstrated a round, circumscribed mass with homogeneous density and no microcalcifications. Targeted ultrasound confirmed a predominantly solid, oval lesion with smooth margins and posterior acoustic enhancement. Fine-needle aspiration was performed in conjunction with imaging.
Biochemical Analysis: Complete blood count, liver function tests, and serum calcium levels were all normal.
Histopathology: Cytological examination showed a mixture of stromal and epithelial cells with no features of malignancy. Subsequent excision revealed a benign phyllodes tumor, characterized by loose, myxoid stroma, mild stromal cellularity, and no more than 3 mitoses per 10 high-power fields.
Current Status: Marginal clearance was obtained, but the lesion was entirely circumscribed. The patient remains asymptomatic, and surveillance ultrasound at 4 months demonstrated no evidence of recurrence.

CASE REPORT 8

Clinical Presentation: A 29-year-old lactating woman presented with a painful, progressively enlarging mass in the right breast of 3 weeks' duration. Initial evaluation supported a diagnosis of mastitis, and she received empiric antibiotic therapy that failed to affect clinical improvement.
Imaging Findings: Breast ultrasound demonstrated a central quadrant lesion measuring 4.1 × 3.7 cm. The lesion exhibited a complex cystic-solid architecture.
Biochemical Analysis: Laboratory evaluation showed mild leukocytosis. Cultures of expressed breast milk yielded no microbial growth.
Histopathology: Wide excisional biopsy was performed. The microscopic examination confirmed a benign phyllodes tumor characterized by cystic change and low, evenly spaced stromal nuclei with minimal mitotic activity.
Current Status: The patient was counselled to resume breastfeeding from the left breast and elected to do so. She remains symptom-free and examination at 10 months after the procedure reveals no evidence of recurrence.

ISSN (O): 2687-5365; ISSN (P): 2753-6556

Table 1: Clinical Summary Table – Phyllodes Tumor Case Series (n = 8)

Case	Age/Sex	Key Symptoms	Imaging Findings	Histopathology	Surgery Type	Outcome
1	42/F	Breast lump (4 months), skin stretch	USG: 6.8 × 5.2 cm lobulated mass with clefts	Borderline phyllodes	Wide local excision	No recurrence at 12 months
2	65/F	Rapid growth, skin ulceration	MRI: 10.4 × 8.1 cm lobulated mass with cystic changes	Malignant phyllodes	Mastectomy + RT	No recurrence at 9 months
3	31/F	Firm, mobile lump	USG: 4.5 × 3.9 cm oval lesion	Benign phyllodes	Wide excision	No recurrence at 15 months
4	54/F	Recurrent lump, h/o of fibroadenoma	Mammogram: 5.8 × 4.6 cm partly circumscribed mass	Borderline phyllodes	Re-excision	No recurrence at 11 months
5	38/F	Slow-growing painless lump	USG: 3.2 × 2.5 cm solid lesion, BI-RADS 3	Benign phyllodes	Wide excision	Surveillance, no recurrence
6	59/F	Rapidly enlarging, painful mass	MRI: 9.6 × 7.3 cm with hemorrhage, necrosis	Malignant phyllodes	Mastectomy + chemo	On 3-month surveillance
7	44/F	Cyclical breast pain with lump	USG: Large fibroadenoma-like lesion	Borderline phyllodes	Wide excision	No recurrence at 6 months
8	29/F	Painful swelling during lactation	USG: 4.1 × 3.7 cm complex cystic-solid lesion	Benign phyllodes	Wide excision	No recurrence at 10 months

DISCUSSION

Phyllodes tumors constitute a rare, yet significant subset of fibroepithelial breast lesions, and their unpredictable biological courses render management challenging. Patients frequently present with a firm, non-tender mass, but accelerated growth, skin ulceration, and documented recurrences within this study compel a more alert clinical approach.

Local recurrences raise significant alarm for lesions designated borderline or malignant. Sotheran et al. linked suboptimal surgical excision and positive margin status to increased rates of recurrence, thereby mandating rigorous preoperative imaging, intraoperative margin evaluation, and, where appropriate, use of neoadjuvant therapies to secure negative margins.[11] Histologic classification refines this risk stratification; Yuniandini et al. noted that borderline and malignant subtypes often demonstrate increasing aggressiveness, warranting closer postoperative surveillance and, in select circumstances, adjuvant interventions following excision.[12]

Eroglu et al. evaluated 40 patients and observed that even tumors categorized as benign could return when surgical margins were inadequate, underscoring the necessity for extensive resection during the index procedure.[13] Noordman et al Tumor size, evidence of cellular atypia, and increased mitotic frequency have been shown to exhibit a strong, independent association with the likelihood of malignancy and the probability of adverse clinical progression. These parameters, therefore, represent pivotal determinants in formulating the strategy for surgical excision as well as in determining the intervals for surveillance imaging thereafter.[14]

In the current cohort, two individuals diagnosed with malignant phyllodes disease underwent mastectomy, followed by adjuvant therapy. Ramakant et al. highlighted the particular difficulties encountered when managing large, high-grade lesions in low-resource settings, where delays in definitive diagnosis often culminate in advanced-stage presentation.[15] Toh et al. encountered similar limitations in an academic hospital-derived series, citing logistical barriers and the compounded operative challenges posed by giant phyllodes tumours.[16]

Rare clinical scenarios, such as the diagnosis of phyllodes tumours during pregnancy, warrant specific consideration. Mustaţă et al. explored the hormonal milieu and the varied clinical dilemmas entailed in treating malignant lesions during gestation, emphasizing the delicate balance required to safeguard both maternal and fetal health.[17] Warner et al. documented a singular case of a giant malignant tumour in a pregnant patient, necessitating a coordinated multimodal regimen and demonstrating the aggressiveness of the condition, as evidenced by rapid volumetric enlargement and subsequent ulceration.[18]

Within our series, local recurrence was disproportionately observed in borderline and malignant subtypes, despite surgical margins that were deemed adequate at the outset. Alkushi et al. reported ongoing challenges in achieving durable disease-free follow-up in tertiary centres managing malignant phyllodes tumours.[19] Valenza et al. subsequently corroborated these findings through a retrospective study, advocating the judicious incorporation of adjuvant radiotherapy in high-risk patients to mitigate the likelihood of recurrence.[20]

In summary, phyllodes tumors present a range of clinical and biological behaviours that complicate management. Therapeutic decision-making must therefore be individualized, considering histopathological grading, tumor size, and the completeness of circumferential surgical margins. Long-term surveillance is essential, especially for tumors classified as borderline or malignant, to

ISSN (O): 2687-5365; ISSN (P): 2753-6556

ensure early detection of recurrence and the rapid instigation of appropriate salvage interventions.

CONCLUSION

Phyllodes tumors of the breast, while infrequent, exhibit a broad histological and clinical spectrum extending from benign to clearly malignant phenotypes. Prompt clinical recognition, rigorous histopathological stratification, and the execution of wide-margin surgical resection remain fundamental to minimizing the likelihood of local recurrence. For borderline and malignant variants, intensified postoperative surveillance is mandated, and consideration of adjuvant treatment—radiation or, in select cases, chemotherapy—may enhance control. The probability of recurrence is significantly influenced by both the histological grade of the tumor and the adequacy of surgical margins. Tailored therapeutic approaches, combined with methodical long-term follow-up, are imperative for achieving the best possible clinical outcomes in affected patients.

REFERENCES

1. Damak T, Gamoudi A, Chargui R, et al. Phyllodes tumors of the breast: a case series of 106 patients. Am J Surg. 2006;192(2):141-147.
2. Palassini E, Mir O, Grignani G, et al. Systemic treatment in advanced phyllodes tumor of the breast: a multi-institutional European retrospective case-series analyses. Breast Cancer Res Treat. 2022;192(3):603-610.
3. Assi H, Salem R, Sukhon F, et al. Phyllodes tumors of the breast treated in a tertiary health care center: case series and literature review. J Int Med Res. 2020;48(1):0300060518803530.
4. Akin M, Irkorucu O, Koksal H, et al. Phyllodes tumor of the breast; a case series. Bratisl Lek Listy. 2010;111(5):271-274.
5. Spitaleri G, Toesca A, Botteri E, et al. Breast phyllodes tumor: a review of literature and a single center retrospective series analysis. Crit Rev Oncol Hematol. 2013;88(2):427-436.
6. Confavreux C, Lurkin A, Mitton N, et al. Sarcomas and malignant phyllodes tumours of the breast – a retrospective study. Eur J Cancer. 2006;42(16):2715-2721.
7. Sawalhi S, Al-Shatti M. Phyllodes tumor of the breast: a retrospective study of the impact of histopathological factors in local recurrence and distant metastasis. Ann Saudi Med. 2013;33(2):162-168.
8. Mokbel K, Price RK, Mostafa A, et al. Phyllodes tumour of the breast: a retrospective analysis of 30 cases. Breast. 1999;8(5):278-281.
9. Yılmaz S, Aykota MR, Karakaya YA, et al. Phyllodes tumors of the breast: a single-center experience. Eur J Breast Health. 2020;17(1):36.
10. Di Liso E, Bottosso M, Mele ML, et al. Prognostic factors in phyllodes tumours of the breast: retrospective study on 166 consecutive cases. ESMO Open. 2020;5(5):e000843.
11. Sotheran W, Domjan J, Jeffrey M, et al. Phyllodes tumours of the breast--a retrospective study from 1982–2000 of 50 cases in Portsmouth. Ann R Coll Surg Engl. 2005;87(5):339.
12. Yuniandini A, Hamdani W, Prihantono P, et al. A retrospective review of phyllodes tumors of the breast from a single institution. Breast Dis. 2021;40(s1):S63-S70.
13. Eroglu E, Irkkan C, Ozsoy M, et al. Phyllodes tumor of the breast: case series of 40 patients. Eur J Gynaecol Oncol. 2004;25(1):123-125.
14. Noordman PCW, Kliouеva NM, Weimann MN, et al. Phyllodes tumors of the breast: a retrospective analysis of 57 cases. Breast Cancer Res Treat. 2020;181(2):361-367.
15. Ramakant P, Chakravarthy S, Cherian JA, et al. Challenges in management of phyllodes tumors of the breast: a retrospective analysis of 150 patients. Indian J Cancer. 2013;50(4):345-348.
16. Toh YF, Cheah PL, Teoh KH. Phyllodes tumours of the breast: retrospective analysis of a University Hospital's experience. Malays J Pathol. 2016;38(1):19.
17. Mustață L, Gică N, Botezatu R, et al. Malignant phyllodes tumor of the breast and pregnancy: a rare case report and literature review. Medicina. 2021;58(1):36.
18. Warner WA, Sookdeo VD, Fortune M, et al. Clinicopathology and treatment of a giant malignant phyllodes tumor of the breast: a case report and literature review. Int J Surg Case Rep. 2017;41:259-264.
19. Alkushi A, Arabi H, Al-Riyees L, et al. Phyllodes tumor of the breast clinical experience and outcomes: A retrospective cohort tertiary hospital experience. Ann Diagn Pathol. 2021;51:151702.
20. Valenza C, De Pas TM, Gaeta A, et al. Primary malignant phyllodes tumors of the breast: a retrospective analysis from a referral center. Eur J Cancer. 2024; 196:113423.

ISSN (O): 2687-5365; ISSN (P): 2753-6556