

Challenges in Management of Malignant Phyllodes Tumor with Thoracic Wall Infiltration a Retrospective Case Series

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Abstract

Malignant phyllodes tumors are rare fibroepithelial breast neoplasms with aggressive behavior, particularly when they infiltrate the thoracic wall, where achieving adequate surgical margins and timely adjuvant treatment becomes difficult. This study aimed to describe the clinical management and outcomes of patients with malignant phyllodes tumors involving the thoracic wall, focusing on surgical margin status, local recurrence, adjuvant radiotherapy, and overall clinical outcome. A retrospective descriptive case-series design was used by reviewing medical records of three patients treated at the Oncology Surgery Department, Padjadjaran University–RS Hasan Sadikin. Data included patient characteristics, surgical treatment, histopathological margin status, timing of radiotherapy, recurrence, metastasis, and clinical outcomes, which were analyzed descriptively. All patients underwent wide local excision. Only one patient achieved a tumor-free margin and remained free from local recurrence while receiving adjuvant radiotherapy, although pleural effusion suspicious for metastasis developed. The other two patients had positive margins, experienced rapid local recurrence within two to four weeks after surgery, and died before radiotherapy could be administered. These findings indicate that achieving negative surgical margins is crucial for local control, while prompt adjuvant treatment and continued systemic surveillance remain important in managing this rare and aggressive disease, especially in patients with extensive thoracic wall involvement.

INTRODUCTION

Phyllodes tumors of the breast (PTB) are uncommon fibroepithelial neoplasms, accounting for approximately 0.3–1% of all primary breast neoplasms (Karim et al., n.d.), (Rageth, 2023). They arise from the periductal stroma and are histologically characterized by a biphasic leaf-like architecture, in which hypercellular stromal fronds are covered by a layer of epithelium. According to the World Health Organization (WHO) Classification of Breast Tumours, phyllodes tumors are stratified into benign, borderline, and malignant (“A Rare Case of Malignant Phyllodes Tumour Presenting with Lung Metastases and Chest Wall Invasion: A Case Report with Review of Literature,” 2025) categories based on a composite of five histological features: stromal cellularity, stromal cell atypia, mitotic activity, stromal overgrowth, and the nature of the tumor border (Tan et al., 2016), (Pathologists, n.d.). A tumor is classified as malignant when marked stromal hypercellularity, marked cytological atypia, stromal overgrowth, permeative borders, and a mitotic count of ten or more per ten high-power

fields are all present; the presence of a malignant heterologous element (such as liposarcoma, osteosarcoma, or chondrosarcoma) independently places a tumor into the malignant category regardless of the other criteria (“A Giant Malignant Phyllodes Tumor of Breast Post Mastectomy with Metastasis to Stomach Manifesting as Anemia: A Case Report and Review of Literature,” 2020).

Malignant phyllodes tumors typically present as rapidly enlarging, painless breast masses, most commonly in women in their fourth to fifth decade of life, although they may occur across a wide age range. A subset of tumors grows to a substantial size before diagnosis (Simpson, 2021) and may infiltrate the underlying deep fascia and chest wall, a presentation associated with a more aggressive clinical course, greater difficulty achieving negative surgical margins, and a higher likelihood of both local recurrence and distant metastasis (*Case Report: Osteosarcomatous Differentiation in the Lung Metastasis of a Malignant Phyllodes Tumor*, n.d.) . Local recurrence in malignant phyllodes tumors has been reported in 21–36% of cases following breast-conserving surgery, while distant metastasis predominantly hematogenous spread to the lungs, bone, and less commonly the pleura, liver, or brain occurs in up to 22% of patients (*Malignant Phyllodes Tumor Metastasized to the Right Ventricle: A Case Report*, n.d.).

The cornerstone of treatment remains surgical excision with a macroscopic margin of at least 1 cm, achieved either through wide local excision with breast conservation or mastectomy when tumor size or chest wall involvement precludes an adequate breast-conserving resection. The role of adjuvant radiotherapy has historically been debated; however, growing evidence including a prospective (Jr et al., n.d.) multi-institutional study and several meta-analyses supports its use in reducing local recurrence following margin-negative resection of borderline and malignant phyllodes tumors, particularly in tumors with high-risk histological features (*Effects of Adjuvant Radiotherapy on Borderline and Malignant Phyllodes Tumors: A Systematic Review and Meta-Analysis*, n.d.; *Phyllodes Tumors of the Breast: Adjuvant Radiation Therapy Revisited*, n.d.). Adjuvant systemic chemotherapy remains without proven survival benefit and is generally reserved for metastatic disease, extrapolating from soft-tissue sarcoma protocols.

Despite these established principles, the management of malignant phyllodes tumors with chest wall infiltration remains particularly challenging: achieving negative margins may require extended resection with chest wall reconstruction, the timing of adjuvant radiotherapy is frequently delayed by wound healing or disease progression, and rapid local recurrence can occur before postoperative treatment is initiated. This case series describes the clinical course of three patients with malignant phyllodes tumors involving the thoracic wall, highlighting the impact of margin status and adjuvant radiotherapy timing on outcomes.

A particularly complex form of this clinical problem occurs when malignant phyllodes tumors extend beyond the breast and infiltrate the deep fascia, pectoral musculature, ribs, intercostal structures, or other components of the thoracic wall. In such circumstances, conventional wide local excision may be insufficient to achieve negative margins, and surgeons may need to consider extended resection, mastectomy, or full-thickness chest wall resection followed by reconstruction. A 2025 systematic review by Lim et al (Mishra et al., n.d.), based on searches of PubMed, Embase, Scopus, and Google Scholar, identified only 18 published patients undergoing full-thickness chest wall resection for locally invasive phyllodes tumors, illustrating how uncommon and poorly represented this condition remains in the literature.

Most cases involved large, recurrent, malignant tumors fixed to the chest wall, with tumor sizes extending up to 38 cm. Although local recurrence was reported in 5.6% of those highly selected cases, distant metastasis occurred in 22.2%, and the median disease-free survival was only 12 months. Thoracic wall involvement therefore creates a dual challenge: complete oncological excision may require technically demanding surgery and reconstruction, while prolonged postoperative recovery may simultaneously interfere with the timely delivery of adjuvant treatment.

This problem is directly relevant to the clinical setting examined in the present research. The source study retrospectively reviews three patients diagnosed with malignant phyllodes tumors accompanied by thoracic wall infiltration at the Oncology Surgery Department of Padjadjaran University–RS Hasan Sadikin. The study specifically records tumor characteristics, surgical management, histopathological margin status, timing and administration of adjuvant radiotherapy, local recurrence, metastatic progression, and overall clinical outcomes. All three patients underwent wide local excision, but the clinical courses differed according to the adequacy of surgical clearance and subsequent treatment, making margin status and postoperative treatment timing particularly relevant dimensions of investigation. This clinical phenomenon reflects the fundamental management difficulty associated with thoracic wall infiltration: surgeons must obtain sufficient tumor clearance despite anatomical limitations, while the oncology team must minimize the interval between surgery and subsequent therapy in a disease capable of progressing rapidly. The manuscript itself recognizes that obtaining negative margins may require extended surgical procedures, that radiotherapy may be delayed by wound healing or disease progression, and that rapid local recurrence may develop before postoperative treatment can be initiated. Thus, the cases provide a clinically focused context through which the interaction between surgical control and treatment timing can be examined (*Comparison of the Mitotic Count With Various Proliferative Markers for the Effective Differentiation of Benign, Borderline, and Malignant Phyllodes Tumors*, n.d.).

Previous studies have consistently demonstrated that surgical treatment remains the principal curative strategy for phyllodes tumors, although the optimal margin width continues to be discussed. Yu et al. synthesized real-world evidence from 52 studies and concluded that margin status and several pathological characteristics including stromal atypia, stromal hypercellularity, stromal overgrowth, mitotic activity, tumor necrosis, and infiltrative tumor borders were important predictors of recurrence. Their meta-analysis reported a malignant phyllodes tumor recurrence rate of 25.1% and also found evidence that postoperative radiotherapy reduced recurrence among malignant tumors. A separate systematic review focusing on surgical margins confirmed that margin status is clinically relevant, while also demonstrating continuing uncertainty regarding the exact width required for adequate control, particularly for borderline and malignant tumors (“Management of Phyllodes Tumor: A Systematic Review and Meta-Analysis of Real-World Evidence,” 2022). This distinction is highly relevant in thoracic wall infiltration because obtaining a broader margin may require removal of pectoral fascia, muscle, ribs, or other chest wall structures. Therefore, the clinically meaningful objective is not simply to perform an extensive operation but to balance oncologically adequate clearance against surgical morbidity and reconstructive requirements, particularly in patients with large or anatomically invasive lesions.

Adjuvant radiotherapy represents another important but incompletely standardized component of malignant phyllodes tumor treatment. Barth et al., in a prospective multi-institutional study, demonstrated that margin-negative resection combined with adjuvant radiotherapy achieved excellent local control for borderline and malignant phyllodes tumors and resulted in lower local recurrence than historically reported following margin-negative surgery alone. Subsequent meta-analytic evidence has generally supported a local-control benefit. Chao et al. analyzed 17 studies involving 696 patients and reported a pooled local recurrence rate of approximately 8% among patients receiving radiotherapy compared with approximately 12% among those treated with surgery alone, although heterogeneity among the available studies remained substantial. Likewise, Zeng et al. concluded that adjuvant radiotherapy significantly decreased local recurrence after breast-conserving surgery for borderline and malignant phyllodes tumors, while failing to demonstrate a corresponding improvement in overall or disease-free survival. These findings suggest that radiotherapy may improve local disease control but cannot compensate for systemic metastatic potential, emphasizing the need to distinguish local recurrence prevention from overall survival outcomes when evaluating treatment effectiveness (*Borderline Phyllodes Breast Tumors: A Comprehensive Review of Recurrence, Histopathological Characteristics, and Treatment Modalities*, n.d.).

More recent research has shifted attention from merely determining whether radiotherapy should be administered toward identifying which high-risk patients should receive it and how rapidly treatment should begin after surgery. Charoenyothakun et al. studied 102 patients, including 52 patients with malignant phyllodes tumors, and found that malignant tumors had substantially greater locoregional recurrence than borderline lesions. Among malignant cases, recurrence occurred in 12.2% of patients receiving radiotherapy compared with 36.4% among those who did not receive it, although the difference did not reach conventional statistical significance. More importantly, among malignant phyllodes tumor patients receiving postoperative radiotherapy, initiation more than 12 weeks after surgery was associated with a markedly increased risk of local recurrence, indicating that treatment timing may have independent clinical importance. At the same time, Lim et al.'s systematic review of locally invasive tumors requiring full-thickness chest wall resection found that the entire available evidence base consisted of only 18 individual case reports, despite searching databases that included Scopus and Google Scholar. These findings reveal a striking imbalance: evidence concerning phyllodes tumors in general has expanded, whereas evidence specifically addressing malignant tumors with thoracic wall infiltration, extensive surgery, postoperative treatment timing, and rapid recurrence remains extremely limited.

Accordingly, an important research gap remains at the intersection of anatomical invasion, surgical margin status, and postoperative treatment timing. Most previous cohort studies and meta-analyses have combined patients with different tumor sizes, histological grades, surgical procedures, and anatomical extents, making their conclusions difficult to translate directly to the rare subgroup with established thoracic wall involvement. Meanwhile, the literature specifically examining chest wall invasion consists predominantly of isolated case reports and small case series, preventing robust conclusions regarding the relative importance of extended resection, margin status, reconstruction, and adjuvant treatment sequencing. Even recent radiotherapy studies acknowledge the absence of randomized trials and the limited

number of patients available for evaluating treatment timing and high-risk subgroups. The present manuscript addresses a narrower but clinically meaningful component of this gap by concentrating specifically on malignant phyllodes tumors with thoracic wall infiltration and examining their clinical courses in relation to surgical margin status and the timing or feasibility of adjuvant radiotherapy. Such focused clinical evidence is particularly valuable for rare diseases in which large prospective trials are inherently difficult to conduct.

The urgency of this research derives from the potentially narrow therapeutic window between surgical intervention and recurrent disease in aggressive malignant phyllodes tumors. Thoracic wall infiltration can make tumor-free resection technically difficult, while major surgery and reconstruction may delay postoperative radiotherapy; conversely, delaying definitive local treatment may allow residual malignant stromal cells to generate rapid recurrence. The source manuscript explicitly identifies these interacting problems, noting difficulties in obtaining negative margins and the possibility that recurrence may occur before planned postoperative treatment begins. This concern is reinforced by contemporary evidence linking delayed radiotherapy beyond 12 weeks with increased recurrence among malignant phyllodes tumor patients receiving postoperative irradiation. Against this background, the novelty of the present research lies not in claiming a new treatment modality, but in integrating three clinically interdependent dimensions thoracic wall infiltration, surgical margin status, and the timing or delivery of adjuvant radiotherapy within a focused retrospective case series. This approach provides clinically contextualized evidence concerning how treatment sequencing and adequacy of initial local control may correspond with markedly different disease trajectories in an exceptionally uncommon and aggressive presentation.

Therefore, this study aims to describe and critically evaluate the clinical course and management of patients with malignant phyllodes tumors involving the thoracic wall, with particular attention to surgical management, histopathological margin status, postoperative radiotherapy, local recurrence, metastatic progression, and clinical outcomes. This objective is consistent with the source manuscript's stated intention to describe three patients with thoracic wall involvement while highlighting the potential importance of margin status and the timing of adjuvant radiotherapy. Scientifically, the study contributes additional case-based evidence to a literature in which chest wall invasion remains represented mainly by isolated reports and very small datasets. Clinically, its contribution lies in supporting multidisciplinary decision-making regarding preoperative assessment of thoracic wall extension, planning of sufficiently comprehensive resection, early assessment of surgical margins, coordination of postoperative radiotherapy, and surveillance for both local and distant disease. The expected benefit is to provide breast surgeons, surgical oncologists, radiation oncologists, reconstructive teams, and other clinicians with a more integrated understanding of the management challenges associated with this high-risk presentation while simultaneously providing a foundation for future multicentre registries and larger observational investigations aimed at developing more standardized management strategies for malignant phyllodes tumors with thoracic wall infiltration.

METHOD

This study employed a retrospective descriptive case-series design to examine the management and clinical outcomes of malignant phyllodes tumors with thoracic wall infiltration. The study was conducted at the Oncology Surgery Department, Padjadjaran University–RS Hasan Sadikin. The study population comprised patients diagnosed with malignant phyllodes tumors involving the thoracic wall whose clinical information was available in the institutional medical records. The final sample consisted of three patients who met the clinical and histopathological characteristics required for inclusion in the case series. Because the original manuscript does not explicitly report a formal sampling method or study period, the cases were treated as all eligible patients identified from the available records included in the retrospective review rather than being assigned an unsupported probability-sampling technique. All three patients underwent wide local excision as the primary surgical intervention, providing a relatively consistent basis for comparison of subsequent margin status, recurrence, adjuvant treatment, and clinical outcomes.

The research instrument consisted of a structured medical-record data extraction framework used to retrieve relevant clinical and treatment information from existing patient records. Variables collected included patient age, tumor characteristics, type of surgical management, histopathological surgical-margin status, administration and timing of adjuvant radiotherapy, occurrence and timing of local recurrence, evidence of distant metastasis, and overall clinical outcome. Surgical-margin status was determined from postoperative histopathological examination, while follow-up information was obtained from clinical and radiological assessments for local recurrence and metastatic disease. Formal psychometric validity and reliability testing, such as construct validity or Cronbach's alpha, was not applicable because the study did not employ questionnaires, rating scales, or latent-variable instruments. Instead, data validity was principally supported by documented clinical diagnoses, histopathological confirmation, and recorded radiological or clinical follow-up. The manuscript does not report a separate inter-rater reliability assessment or validation procedure for the data extraction process; therefore, such procedures should not be claimed unless they were actually performed by the research team.

Data collection was conducted retrospectively by reviewing the medical records of the three eligible patients. The procedure involved identifying patients with malignant phyllodes tumors and thoracic wall infiltration, extracting their baseline and tumor characteristics, documenting the surgical procedure and final histopathological margin status, recording the timing and receipt of postoperative radiotherapy, and subsequently tracing clinical and radiological follow-up for local recurrence, suspected distant metastasis, survival status, and other relevant outcomes. The data were analyzed using descriptive and comparative case-based analysis, in which each patient's clinical course was presented individually and subsequently compared according to surgical-margin status, recurrence pattern, radiotherapy administration and timing, and clinical outcome. No inferential statistical testing was appropriate because of the extremely small sample size and descriptive case-series design. Likewise, the original manuscript does not specify the use of statistical software; accordingly, no particular software package should be reported unless confirmed by the authors. The findings were summarized using narrative descriptions and tabular comparisons to identify clinically relevant patterns, particularly the relationship between negative versus positive surgical margins, rapid

postoperative recurrence, the feasibility and timing of adjuvant radiotherapy, and subsequent patient outcomes.

RESULTS AND DISCUSSION

Three patients with malignant phyllodes tumors and thoracic wall infiltration were included, with ages ranging from 18 to 52 years (“Case Report: Re-Irradiation of out-of-Field Recurrence of Malignant Phyllodes Tumors of the Breast after Adjuvant Radiotherapy,” 2026). All three underwent wide local excision; however, tumor-free (negative) surgical margins were achieved in only one patient (Patient A). A summary of patient characteristics, surgical outcomes, and clinical course is presented in Table 1.

Table 1. Summary of Patient Characteristics and Clinical Outcomes Individual ages within the 18–52 range were not separately reported per patient in the source data

Patient	Age	Surgical Margin	Local Recurrence	Adjuvant RT	Outcome
A	18–52 range*	Tumor-free (clear margin)	None to date	Given, 6 months post-op; ongoing	Alive; pleural effusion, suspected metastasis
Y	18–52 range*	Positive margin	4 weeks post-op	Not administered (deceased before RT)	Deceased
E	18–52 range*	Positive margin	2 weeks post-op	Not administered (deceased before RT)	Deceased

Patient A

Patient A underwent wide local excision and achieved tumor-free surgical margins. Adjuvant radiotherapy was administered approximately six months after surgery, with treatment ongoing at the time of this review. No local recurrence has been observed to date. However, the patient was subsequently diagnosed with pleural effusion, suspected to be secondary to metastatic disease, indicating that despite local disease control, systemic surveillance remains critical even in patients who achieve clear margins and receive adjuvant radiotherapy.

Patient Y

Patient Y underwent wide local excision; however, surgical margins were not tumor-free. Local recurrence developed rapidly, within four weeks of the initial surgery. The patient died before adjuvant radiotherapy could be administered, illustrating the aggressive trajectory that can follow incomplete excision in tumors with chest wall infiltration.

Patient E

Patient E similarly underwent wide local excision with a positive surgical margin. Local recurrence occurred even more rapidly than in Patient Y, within two weeks of surgery, and the patient died before adjuvant radiotherapy could be initiated. This case represents the most rapid and fatal disease course among the three patients described.

Histopathological Classification Context

For reference, Table 2 summarizes the WHO histological criteria used to distinguish benign, borderline, and malignant phyllodes tumors. All three patients in this series fulfilled criteria for the malignant category, consistent with the aggressive clinical behavior observed, including rapid local recurrence and, in one case, suspected distant metastasis despite clear margins and adjuvant treatment (*Malignant Phyllodes Tumor with Metastases to Lung, Adrenal and Brain: A Rare Case Report*, n.d.).

Table 2. WHO Histological Classification Criteria for Phyllodes Tumors

Feature	Benign	Borderline	Malignant
Stromal cellularity	Mild	Moderate	Marked
Stromal atypia	Minimal/absent	Mild–moderate	Marked
Mitotic activity (per 10 HPF)	< 5	5–9	≥ 10
Stromal overgrowth	Absent	Usually absent	Present
Tumor border	Well-circumscribed	Well-circumscribed/focally infiltrative	Permeative/infiltrative
Malignant heterologous elements	Absent	Absent	May be present (defines malignant regardless of other criteria)

This case series illustrates two of the most consistently reported determinants of outcome in malignant phyllodes tumors: surgical margin status and the timely administration of adjuvant radiotherapy. Patient A, who achieved a tumor-free margin, has remained free of local recurrence, consistent with the well-established principle that margin-negative resection is the single most important predictor of local control in phyllodes tumors. In contrast, Patients Y and E, both of whom had positive margins, experienced local recurrence within weeks of surgery and died before adjuvant radiotherapy could be administered a pattern that underscores the aggressive natural history (Barrio et al., n.d.) of incompletely excised malignant phyllodes tumors, particularly when chest wall infiltration limits the feasibility of achieving an adequate resection margin (*Atypical Distant Metastasis of Breast Malignant Phyllodes Tumors: A Case Report and Literature Review*, n.d.).

Chest wall infiltration presents a distinct surgical challenge. Achieving a macroscopic margin of at least 1 cm, as recommended by consensus guidelines, may require resection of the underlying pectoral fascia, muscle, or, in more extensive cases, full-thickness chest wall resection with reconstruction. When such extended resection is not performed or is technically limited, residual microscopic or macroscopic disease increases the likelihood of rapid local regrowth, as observed in Patients Y and E. This observation aligns with reports in the literature describing chest wall and diaphragmatic invasion as markers of advanced, aggressive disease with poor responsiveness to conventional adjuvant therapy.

The role of adjuvant radiotherapy in this series is notable. Although its survival benefit remains debated in the broader literature, adjuvant radiotherapy after margin-negative resection has been shown in a prospective multi-institutional study and subsequent meta-analyses to significantly reduce local recurrence in borderline and malignant phyllodes tumors. Patient A's sustained local control after receiving adjuvant radiotherapy is consistent with this evidence. Conversely, Patients Y and E did not survive long enough to receive adjuvant radiotherapy at all, which highlights a critical clinical gap: for tumors with high-risk features such as chest wall infiltration and positive margins, the interval between surgery and initiation of adjuvant therapy may itself be a determinant of survival, as rapid recurrence can outpace conventional treatment timelines.

The pleural effusion identified in Patient A, suspected to reflect metastatic disease despite excellent local control, is consistent with reports describing the lung and pleura as recognized, if less common, sites of hematogenous spread in malignant phyllodes tumors. Case reports in the literature have similarly documented metastatic spread to the axillary lymph nodes and lungs synchronously at presentation, as well as more unusual distant sites including the stomach, adrenal gland (*Unusual Metastatic Sites in Malignant Phyllodes Tumor Detected on FDG PET/CT*, n.d.), brain, and even the heart, underscoring the unpredictable and wide-ranging metastatic potential of this tumor once systemic dissemination occurs. This finding reinforces that local control alone even when optimal does not eliminate the risk of systemic disease, and that long-term surveillance for distant metastasis remains necessary regardless of margin status or receipt of adjuvant radiotherapy.

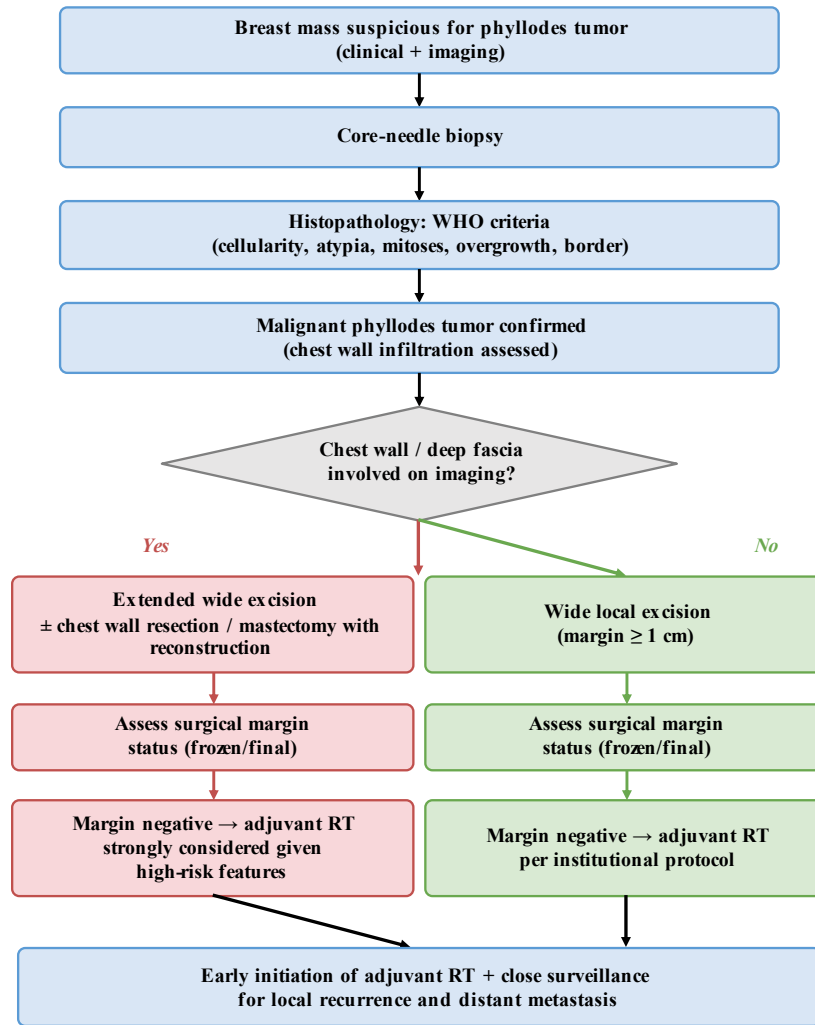


Figure 1. Proposed Management Algorithm for Malignant Phyllodes Tumor with Suspected Chest Wall Infiltration

Taken together, the findings of this case series support a management approach in which (1) chest wall involvement is actively assessed preoperatively with cross-sectional imaging to plan for extended resection when necessary, (2) surgical margin status is confirmed as early as possible, with re-excision or extended resection considered when margins are positive, and (3) adjuvant radiotherapy is planned and initiated without unnecessary delay in patients with high-risk histological or anatomical features, given the potential for rapid local recurrence[11,10]. A proposed algorithm incorporating these principles is presented in Figure 1.

This series has several limitations inherent to its retrospective design and small sample size. Detailed tumor dimensions, precise histological grading parameters, and imaging findings for each patient were not fully available for analysis, limiting the ability to draw definitive causal conclusions regarding the specific factors driving the divergent outcomes observed. Nonetheless, the stark contrast between the outcome of the margin-negative, radiotherapy-treated patient and the two margin-positive patients who died before adjuvant treatment

reinforces messages already well supported in the broader literature, and adds a clinically relevant illustration of how rapidly disease can progress when initial surgical control is inadequate.

CONCLUSION

This study concludes that the management of malignant phyllodes tumors with thoracic wall infiltration remains clinically challenging because treatment outcomes are strongly influenced by the ability to achieve adequate surgical margins and to proceed with postoperative management without unnecessary delay. Among the three patients included in this retrospective case series, all underwent wide local excision, but only one patient achieved a tumor-free surgical margin. This patient remained free from local recurrence and subsequently received adjuvant radiotherapy, although pleural effusion suspicious for metastatic disease developed during follow-up. In contrast, the two patients with positive surgical margins experienced extremely rapid local recurrence, occurring within two to four weeks after surgery, and both died before adjuvant radiotherapy could be administered. These contrasting clinical courses suggest that complete initial tumor resection is critical for local disease control and that thoracic wall involvement requires careful preoperative assessment to determine whether extended resection or reconstruction is necessary to obtain adequate margins. The findings also emphasize that achieving local control does not eliminate the risk of distant metastatic progression, thereby supporting the need for continued systemic surveillance even among patients with clear margins and postoperative radiotherapy. Future research should involve larger, preferably multicentre prospective or retrospective cohorts to provide stronger evidence regarding prognostic factors and optimal management strategies for malignant phyllodes tumors with thoracic wall infiltration. Particular attention should be given to accurately documenting tumor size and extent of chest wall invasion, detailed histopathological characteristics, imaging findings, surgical-margin width, reconstructive procedures, the interval between surgery and adjuvant radiotherapy, patterns of recurrence, distant metastasis, disease-free survival, and overall survival. These recommendations are especially important because the present study is limited by its retrospective design, very small sample of three patients, and incomplete availability of detailed tumor dimensions, histological parameters, and patient-specific imaging findings, which prevent definitive causal conclusions from being drawn. Future studies should also investigate whether early re-excision for positive margins, planned extended chest wall resection, and earlier initiation of adjuvant radiotherapy can meaningfully improve local control and survival. Developing multicentre registries and standardized treatment protocols would further strengthen the evidence base and support more consistent multidisciplinary decision-making for this rare but highly aggressive breast tumor presentation.

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