

Recurrent Intermediate-Grade Phyllodes Tumor with Sarcomatous Transformation: A Rare and Aggressive Evolution -

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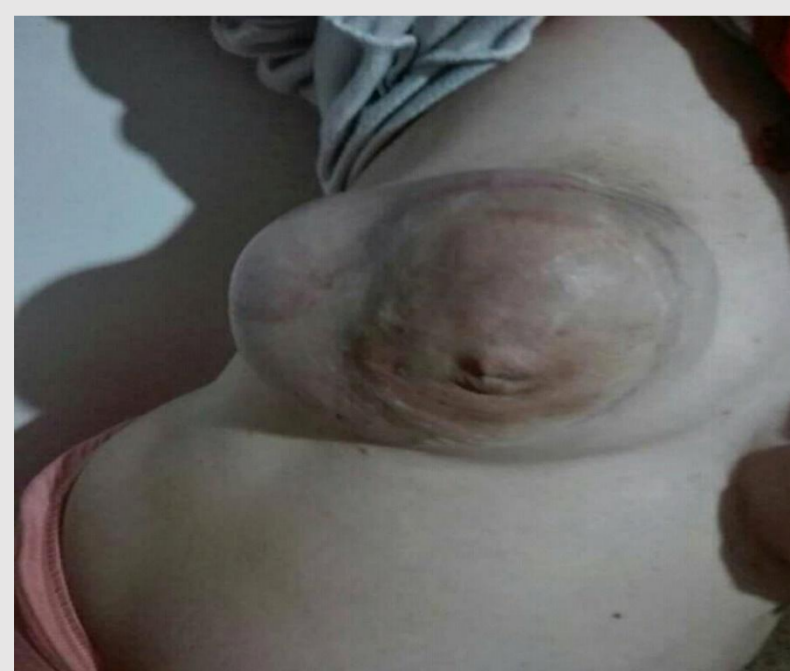
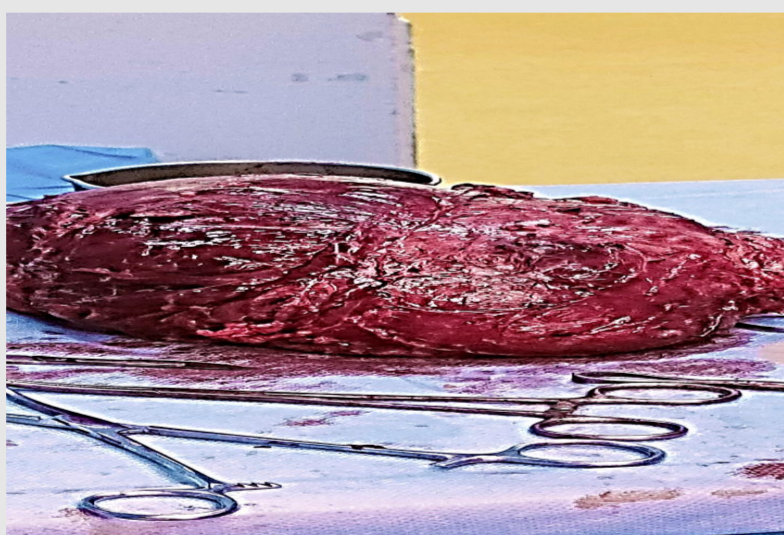
Introduction

Phyllodes tumors are rare fibroepithelial breast neoplasms, accounting for less than 1% of all breast tumors. They are classified as benign, borderline (intermediate), or malignant. Intermediate forms are particularly challenging due to their potential for recurrence and rare risk of sarcomatous transformation. We report an exceptional case that evolved through multiple recurrences with muscle infiltration and bilateral breast involvement.

Keywords: Phyllodes tumor, Borderline phyllodes, Sarcomatous transformation, Breast sarcoma, Contralateral breast, Radiotherapy

Case Presentation

A 46-year-old woman, homemaker, with no significant medical history, initially underwent surgical excision for a benign phyllodes tumor located in the upper quadrants of the right breast. She subsequently developed a tumor recurrence measuring 16 cm, which required a second surgical intervention (tumorectomy). First histopathological analysis suggested a grade 2 phyllodes tumor, with additional immunohistochemistry (IHC) performed to rule out grade 3. A second expert review by the breast pathology committee confirmed the diagnosis of intermediate-grade (grade 2) phyllodes tumor. --- Clinical Examination Right breast: Two firm, painless masses measuring 9 × 7 cm and 5 × 6 cm. Left breast: No detectable abnormalities. Axillary lymph nodes: No palpable adenopathy. --- Breast Ultrasound Findings Imaging revealed two adjacent masses in the right breast: A 48 × 34 mm hypoechoic mass in the upper outer quadrant. A 67 mm retro-areolar mass, partially cystic with thick internal septations. Bilateral axillary lymph nodes appeared benign. BI-RADS classification: 4a. --- Tissue Biopsy A core needle biopsy confirmed a fibroepithelial lesion consistent with a phyllodes tumor. --- Multidisciplinary Tumor Board (RCP) Decision Given the tumor recurrence, significant size, and confirmed intermediate histology, the RCP recommended a right mastectomy. --- Clinical Evolution Despite mastectomy, the patient experienced a second local recurrence, this time infiltrating the pectoralis major muscle, which required surgical management by the thoracic plastic surgery team. Later, she developed a third recurrence at the muscle site along with the emergence of a new mass in the contralateral (left) breast. Final histopathological evaluation revealed a sarcomatous transformation of the phyllodes tumor—marking an aggressive and rare evolution of the disease.



Discussion:

Intermediate phyllodes tumors are unpredictable and can exhibit aggressive behavior. Muscle infiltration and bilateral involvement are rare and indicate poor prognosis. Sarcomatous transformation, although uncommon, requires a complete therapeutic reevaluation. In this case, a multidisciplinary tumor board opted for adjuvant radiotherapy after sarcomatous transformation.

Conclusion: This case illustrates the aggressive potential of intermediate phyllodes tumors and the critical importance of early radical surgery, close monitoring, and multidisciplinary management. The evolution toward sarcomatous transformation and contralateral spread is rare but underscores the need for long-term vigilance

References:

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