



# Malignant Phyllodes Tumor of the Breast: A Case Study

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Malignant phyllodes tumors of the breast are rare, fast-growing tumors that can be difficult to diagnose. A case study is featured about a young adult patient who lacked insurance and received a delayed diagnosis of malignant phyllodes tumor of the breast. This article includes pertinent clinical and age-specific considerations for comprehensive management.

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Phyllodes tumors of the breast (PTB) are generally rare tumors and represent less than 0.5 percent of all breast tumors (Reinfuss et al., 1996). Those neoplasms are most commonly diagnosed between 35–55 years of age, with reports of cases in both adolescents and among older adult women (Khosravi-Shahi, 2011; Reinfuss et al., 1996). PTB are classified as benign, borderline, or malignant based on the degree of atypia in the stroma and overall mitotic rate (Kraemer et al., 2007). The five-year survival rate for malignant PTB is reported to range from 66%–82% (Khan & Badve, 2001). Following local excision for malignant PTB, Barth (1999) concluded that local recurrence occurs in 65% of patients, and this rate drops to 36% among those with wide surgical margins.

## Case Study

L.P., a 22-year-old woman, presented to the outpatient breast surgical oncology clinic of a tertiary care center. Her chief complaint was a nine-month history of a

left breast mass. L.P. is a current two-pack per day smoker; her history is otherwise negative. She noted that the size of the mass initially fluctuated in relation to her menstrual cycle. Recently, she perceived a significant increase in the mass. L.P. noted that this increase occurred during a six-week period of time. A left breast ultrasound performed one month prior at her local hospital revealed a lobular solid mass with circumscribed margins measuring 6.9 x 2.4 cm and was given a BIRADS 4B classification (suspicious abnormality with intermediate concern for malignancy), and a biopsy was recommended. L.P.'s initial workup was complicated by the absence of insurance. She sought care through the free health clinic in her rural area. The coordination required by the free clinic complicated the scheduling of imaging and referral to the outpatient breast surgical oncology clinic.

L.P.'s initial visit to the tertiary breast clinic included reimaging the mass. Unfortunately, the repeat imaging revealed an increase in size to 7.8 cm in the four-week interval. In addition, the vascularity

of the lesion was noted to have increased. A core biopsy demonstrated a low-grade spindle cell neoplasm with a primary differential diagnosis of cellular fibroadenoma versus phyllodes tumor. L.P. was recommended to undergo an excisional biopsy. She was counseled regarding potential need for additional surgery if the mass proved to be malignant.

Pathology from the excision was consistent with a high-grade malignant phyllodes tumor. A computed tomography (CT) scan of the chest was performed to rule out metastatic disease. L.P. was then taken back to the operating room for re-excision. Her second surgery achieved greater than 5 cm tumor-free margins circumferentially. Because of the significant cosmetic defect after her second surgery, L.P. ultimately decided to undergo a completion mastectomy with implant reconstruction.

## Diagnostic Evaluation

In general, PTB tend to be large, fast-growing, and difficult to differentiate from benign fibroadenoma in clinical presentation, and radiologic and pathologic findings (Kraemer et al., 2007). PTB are usually palpable and appear as mobile dominant masses in physical examinations (Khan & Badve, 2001). These tumors often exhibit a period of rapid growth even after being stable for months or longer (Telli, Horst, Guardino, Dirbas, & Carlson, 2007). On mammogram, PTB appear well defined and can be oval, round, or lobulated (Telli et al., 2007). Ultrasound findings also include a heterogeneous echo pattern and absent microcalcification (Chao, Lo, Chen, & Chen, 2002).

The diagnosis of malignant PTB is based on histopathologic evaluation. Like their