

Introduction

Phyllodes tumors of the breast are fibroepithelial lesions classified as benign, borderline, or malignant. They are rare, with an incidence of 2.1 per million women, more common in Latina whites, at a median age of 45 years.

We present a case of a malignant phyllodes tumor in an African American female.

Case Presentation

A 56-year-old African American female presented to ED with worsening shortness of breath, associated chest tightness and pleurisy. She had a 3.7cm tumor in her right lung along with a large right-sided pleural effusion on CT. Image-guided thoracentesis removed 800mL fluid, providing symptomatic improvement. She was seen by her outpatient oncologist a few days prior where she was advised on the progression of her disease and informed she should consider hospice. Patient was discharged with home hospice care and ultimately expired.

Past Case History

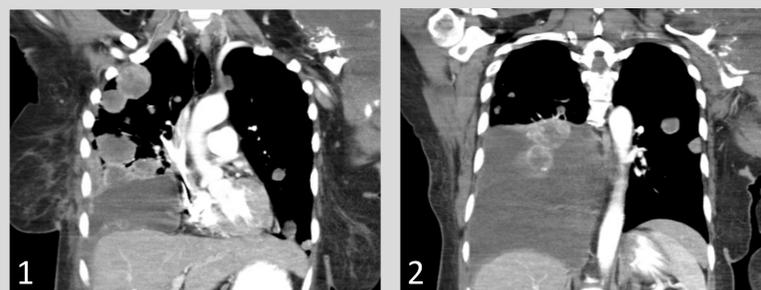
3 to 4 years ago:

- Diagnosis of malignant phyllodes tumor of right breast and intraductal papilloma of left breast, initially from self-breast exam, confirmed by image-guided biopsy.
- Treatment was lumpectomy with good margins and radiation.

1.5 years ago:

- Admission for intractable shoulder pain that developed over the course of 1-2 months. Worsening shoulder stiffness and soreness thought to be from exercise regimen.
- Imaging found significant disease progression with multiple pulmonary nodules and new skeletal metastases.
- Initial pathology was concerning for an osteosarcoma, urgent chemotherapy initiated.
- Further evaluation at MD Anderson revealed tumor burden that prevented adequate resection and pathology workup of metastatic malignant phyllodes tumor instead of a primary high-grade osteosarcoma.

Case Visuals



Figures 1 and 2. Outpatient CT scan prior to patient admission showing multiple pulmonary nodules and right-sided pleural effusion.



Figure 3. Chest x-ray prior to thoracentesis showing large right-sided pleural effusion.



Figure 4. PET scan during workup of shoulder metastases

Discussion

Phyllodes tumors are uncommon, accounting for <1% of all breast neoplasms, and often difficult to differentiate from other breast tumors. Needle or excisional biopsy is important for accurate diagnosis. Complete excision is important to prevent recurrence; however, malignant tumors have a high rate of recurrence, with common metastasis to the lungs. Due to their rarity, there are no evidence-based guidelines for post-treatment surveillance specific to phyllodes tumors. Some recommendations have follow-up at 6-month intervals for 2 years, then yearly afterwards.

Conclusion

The patient had adequate follow-up after her initial lumpectomy, however this case points to the difficulty with phyllodes tumors of unpredictable rates of recurrence. Consideration for earlier follow-up or further imaging for malignant or borderline tumors should be considered for disease management.

References

1. Mishra SP, Tiwary SK, Mishra M, Khanna AK. Phyllodes tumor of breast: a review article. *ISRN Surg*. 2013;2013:361469. doi:10.1155/2013/361469.
2. Reinfuss M, Mituś J, Duda K, Stelmach A, Ryś J, Smolak K. The treatment and prognosis of patients with phyllodes tumor of the breast: an analysis of 170 cases. *Cancer*. 1996;77(5):910–916. [https://doi.org/10.1002/\(sici\)1097-0142\(19960301\)77:5<910::aid-cnrcr16>3.0.co;2-6](https://doi.org/10.1002/(sici)1097-0142(19960301)77:5<910::aid-cnrcr16>3.0.co;2-6).
3. Telli ML, Horst KC, Guardino AE, Dirbas FM, Carlson RW. Phyllodes tumors of the breast: natural history, diagnosis, and treatment. *J Natl Compr Canc*. 2007;5(3):324–330. <https://doi.org/10.6004/jnccn.2007.0027>.
4. Barth RJ Jr, Wells WA, Mitchell SE, Cole BF. A prospective, multi-institutional study of adjuvant radiotherapy after resection of malignant phyllodes tumors. *Ann Surg Oncol*. 2009;16(8):2288–2294. <https://doi.org/10.1245/s10434-009-0489-2>.