

BACKGROUND

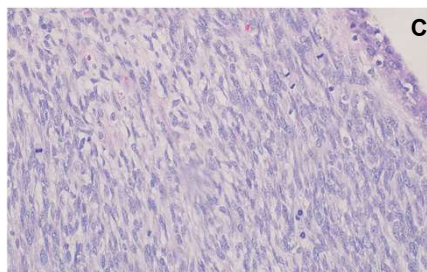
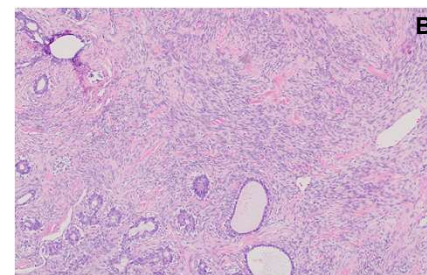
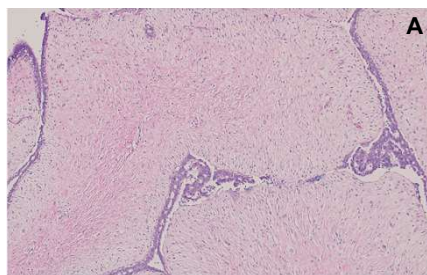
- Phyllodes tumor (PT) is a rare fibroepithelial lesion of the breast with variable malignant potential.
- Black women have a higher incidence of a related benign tumor, fibroadenoma, but there are limited epidemiological data on PT.
- The aim of our study was to evaluate race-related differences in the clinical presentation, histologic features, and outcomes of PT.

METHODS

Our institutional pathology database was queried for breast specimen reports from January 2009 through October 2019 containing the search term “Phyllodes”. All subsequent breast pathology reports of identified patients were reviewed. Demographic, clinical, and pathologic variables were extracted from charts of patients whose final breast specimen had a pathologic diagnosis of PT.

RESULTS

- Fifty four records containing the search term “Phyllodes” were identified, from 41 distinct patients. Among 31 who underwent mass excision, twelve had a final diagnosis of PT: three malignant, two borderline, and seven benign.
- All women with malignant and borderline PTs were black, compared with 29% of those with benign PT. The remainder of the benign PT subgroup was white except for one Hispanic woman.
- The mean age at diagnosis was 50 years for both malignant and benign PT, compared with 32 years for borderline PT.
- The mass was detected by screening mammogram in four of the benign PT patients, and by the patient in the remainder.
- The mean tumor size was 13.7cm for malignant PT, 6.8cm for borderline PT, and 5.8cm for benign PT.
- Re-excision or mastectomy was performed due to positive or close margins in 2/3 patients with malignant PT, 1/2 patients with borderline PT, and 3/7 patients with benign PT.
- One patient had a local recurrence seven months after re-excision of a malignant PT to negative margins.



High-powered field views of representative pathological specimens. (A) Benign Phyllodes tumor with increased stromal growth, slightly increased stromal cellularity, and non-neoplastic epithelium. (B) Borderline Phyllodes tumor with increased stromal cellularity and mild stromal atypia, with no overt mitotic activity. (C) Malignant Phyllodes tumor with markedly cellular stroma, marked stromal atypia, and increased mitotic activity; (> 5 mitosis/mm²).

CONCLUSIONS

- We observed disproportionate rates of aggressive features of PT among black women.
- A multi-institutional PT registry would facilitate improved knowledge about race-related differences in the presentation and outcomes of this rare tumor.

REFERENCES

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