Fibroglanular Lesions

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Fibroglanular lesions

Fibroglanular lesions

• Nothing to disclose

Fibroglanular lesions

Stroma
Epithelium

Stroma
Epithelium

Fibroadenoma and Phylloides Tumors
Fibroglandular Lesions

Fibroadenoma  Phyllodes Tumor

Common  Rare

Features useful to distinguish FA from phyllodes tumor

- Stromal cellularity
- Stromal atypia
- Stromal mitotic activity
- Stromal growth relative to epithelium
- Stromal interface with non-lesional breast

Features NOT useful to distinguish FA from phyllodes tumor

- Epithelial canalicular configuration
- Character of stroma
  - Myxoid
  - Infarction
- Presence of fat, smooth muscle, PASH-like or myofibroblastic areas
- Presence of stromal giant cells
Ultrasound

Fibroadenoma

- Cellular
- Complex
  - Sclerosing adenosis, papillary apocrine change, epithelial calcification
- Juvenile (clinical term)
  - Rapid growth that deforms the breast, stretches the skin in a young woman
Myxoid stroma

Fibroadenoma, sclerotic

Fibroadenoma, myofibroblastic stroma
Fibroadenoma, myofibroblastic stroma

PASH-like

Cellular fibroadenoma, lipomatous

Fibroadenoma with bizarre stromal giant cells
Fibroglandular Lesions

Fibroadenoma  Phyllodes Tumor

Cellular fibroadenoma

Cellular Fibroadenoma
Goal

Appropriate (but not deforming) surgery

The Spectrum of Phyllodes Tumors

Benign → vs fibroadenoma

Malignant → vs sarcoma
Histologic classification of Phyllodes Tumor

- 2 tier
  - Low grade, high grade (implies malignant behavior for all)
- 3 tier
  - Benign, low grade, high grade (more on malignant end of spectrum)
- 3 tier
  - Benign, borderline, malignant (clinically relevant)

Phyllodes Tumor

- Uncommon!
- 2.5% of fibroglandular lesions
- Less than 1% in referral centers
- Less than 0.5% in community practices

Phyllodes (less than 2.5% of all fibroglandular lesions)

- Benign (75%)
- Borderline (20%)
- Malignant (5%)
Differential diagnosis with fibroadenoma

- Benign
- Borderline
- Malignant
## Classifying Phyllodes Tumors

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**Stromal overgrowth 4X field**

**Malignant Phyllodes Tumor**

- High mitotic activity >10/10 HPF

**Malignant Phyllodes Tumor**

- Stromal overgrowth 4X field
Malignant Phyllodes Tumor

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osteosarcomatous differentiation

Liposarcomatous differentiation
Classifying Phyllodes Tumors

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PT diagnostic categories

- How much weight to assign to various categories?
- Features are semiquantitative at best
- Mitotic activity
  - Benign category
    - <1 Kleer
    - ≤2 Rosen and Tan
    - ≤4 Pietruszka
    - <10 Moffat
    - ≤4 OK in FA (Fechner)

Most useful

- Stromal overgrowth
- Infiltrative border

Best approach

- Use constellation of features, not just a single parameter
- “Err” on the benign side
- Malignant usually obvious, but RARE
- Borderline vs. benign, but both have implication for local recurrence only
Clinical Behavior

- Local recurrence does not equate with malignancy
- Malignant PT means metastatic capability
- PT often recur, but DO NOT metastasize

Clinical Management

- Any can recur with inadequate margins
- Rate of local recurrence related margin width
- No significant role for XRT
- <25% with malignant phyllodes will develop hematogenous metastases, pulmonary
- Most important differential diagnosis is metaplastic carcinoma

Core Biopsy Considerations

Fibroglanular lesion
Fibroadenoma
Phyllodes Tumor

Moderate to marked stromal cellularity
Stromal atypia
Mitoses

Dx: Fibroglanular lesion
see comment
Surgically excise

Dx: Fibroadenoma
Follow clinically or remove
Which feature is NOT useful in distinguishing FA from PT

1. Interface of lesion with adjacent breast
2. Presence of stromal giant cells
3. Stromal cellularity
4. Stromal mitotic activity