Breast Evaluation & Management Guidelines

Pamela L. Kurtzhals, M.D., F.A.C.S.
Head, Dept. of General Surgery
Scripps Clinic, La Jolla

Objective

- Review screening & diagnostic guidelines
- Focused patient complaints
- The abnormal screening mammogram
- Screening controversies
- Defining the high risk patient
Screening Guidelines

- American Cancer Society
  - Yearly screening beginning at age 40

- High risk patients start 5-10 years prior to the youngest 1st degree relative with breast cancer

- Self breast exams optional

U.S. Preventive Services Task Force - 2009

- Revised mammogram guidelines
  - Screening every 2 years beginning at 5 for a women with average risk
  - Doctors should not teach women to do self-exams
  - Insufficient evidence for screening women over the age of 75
Guidelines?

- Screening mammogram beginning at 40
  - ACS, ACR, AAFP, American College of Surgeons

- Clinical breast exam (CBE) annually starting at 40 yearly
  - Personal belief/recommendation, AAFP

- Breast health awareness
  - Personal belief/recommendation, Mayo Clinic

Diagnostic Films

- Mammogram
  - Any clinical finding
  - Personal history of cancer, < 5 years

- Ultrasound
  - Breast pain, palpable lump, nipple discharge
**Diagnostic**

- Diagnostic Mammograms
  - 3 views: CC, lateral and spot compression

**Focused Complaints**

- Breast Mass
- Nipple discharge/ nipple changes
- Breast pain
- Breast abscess or mastitis
- Gynecomastia
**Dominant Breast Mass**

- **History**

- **Management**
  - CBE
  - Diagnostic mammogram & U/S

- **Differential**
  - Cysts, solid lesions, fibrocystic change

**Breast Mass**

- **Cycle considerations**
  - How long do you observe?

- Palpable lesion, with normal films – what’s next
  - Surgical referral
  - Core biopsy vs. observation, based on suspicion
  - 3 month return
Simple Cyst

- Treatment based on symptoms
- Aspiration
  - Free hand or image guided
- Excision not favored

Complex Cyst

- Treatment
  - Observation, repeat imaging studies
- Malignancy rate estimated at 0.3%
Diagnosis & Management of Benign Breast Disease
Pamela Kurtzhals, MD

Solid Lesions

- Benign tumors
  - Fibroadenomas, phyllodes, papilloma, lactating adenoma

- Malignant tumors

Benign Solid Tumors

- Fibroadenoma
  - Biopsy considerations

- Treatment is multi-factorial
  - Surgical or observation
  - Cryoablation
  - Repeat imaging in 6 months, then 1 or 2 years to document stability
Cryoablation of Benign Tumors

- Percutaneous non-surgical option for treatment of biopsy proven fibroadenomas < 3-4 cm
- Contraindications: < 5mm from skin
- Resolution over next year

Phyllodes

- Cellular lesion
- Treatment - excision
- Malignant potential
  - Recurrence up to 50%, based on grade
Lactating Adenoma

- Solid lesion that arises during pregnancy not lactation
- Core biopsy
- Consider resection once breast feeding completed or observation

Malignant Tumors

- Invasive ductal/lobular
- Multidisciplinary team
  - Surgeon
  - Radiation Oncologist
  - Medical Oncologist
- Surgical options
  - No difference in survival
Fibrocystic/Nodular Changes

- Cyclic in nature
- Associated with mastodynia
- Office repeat CBE, 3 or 6 months
Nipple Discharge

- Unilateral vs. bilateral
- Spontaneous vs. manually induced
- Single or multiple ducts
- Cytology controversial
**Bilateral Nipple Discharge**

- **Physiologic causes**
  - Hyperprolactinemia

- **Mammary duct ectasia**
  - Dilation of the ducts in post-menopausal women

- Do not encourage manipulation

---

**Nipple Discharge**

- So what’s important . . .
  - Unilateral, spontaneous, age of onset, (color means nothing)

- Diagnostic films

- Surgical consultation

- Negative studies indication for ductogram or MRI
**Nipple Discharge**

- Intraductal papilloma
  - Small pre-cancerous association 1-3%
- Surgical excision is always recommended
- If films negative very close follow-up

**Nipple Changes**

- Is it PAGETS?
- CBE findings - very important, lump?
- Diagnostic mammogram and U/S
- Surgical referral
  - Punch biopsy
Skin Manifestations

- Etiologies include: fungal, hidradenitis suppurativa, eczema

- Treatment
  - Steroid, anti-fungal creams/powder, or moisture barriers

Pearls

- Unilateral recent nipple inversion suspicious

- Nipple always involved in Paget’s, disappears in advanced cases

- Failure to resolve signs of inflammation with >10 day course of broad spectrum antibiotics, concern for inflammatory
Mastodynia

- Cyclic vs. non-cyclic
- Duration >3 months, surgical referral
- Diagnostic mammogram & U/S
- Treatment
  - Cessation of caffeine, chocolate
  - EPO: 3000 mg for 8 weeks, taper to 1500 mg
  - Protective Breast Formula, C. Horner M.D.

Breast Abscess/Mastitis

- Lactational
  - Warm compresses, antibiotics, pumping
- Non-lactational
  - Diagnostic films
  - Aspiration, repeat as needed
  - Broad spectrum antibiotics
Breast Abscess/ Mastitis

- **Treatment**
  - Rarely surgical
  - Antibiotics, guided aspirations, high dose steroid taper once negative cultures

- **Recurrent or persistent disease**
  - Granulomatous mastitis, difficult to treat
  - Surgical & I.D. referral

- Smoking cessation!!!

Granulomatous Mastitis
Gynecomastia

- Symptomatic - diagnostic mammogram & U/S a must!
- Causes: physiologic, pathologic, pharmacologic
- Surgical referral
  Core biopsy, surgical excision or observation

Abnormal Screening Mammogram

- Additional films: spot compression, oblique views and/or ultrasound
- Biopsy via image guided is standard of care over surgical open biopsy
- Majority negative
Image Guided Biopsy

- Stereotactic
  - Must see abnormality in 2 views
  - 6-8 samples taken w/ 9 or 11 gauge needle
  - Clip placed post procedure

- Management

Abnormal Mammogram

- Calcifications
  - New or increased

- Masses or architectural change
  - Spectrum includes cysts to cancer
Abnormal Mammogram

- Non-proliferative breast disease - benign
  - No increased risk
  - Duct ectasia, typical or mild hyperplasia

- Proliferative breast disease - benign
  - Increased risk
  - Atypical cells, papillomas

- Premalignant lesions
  - DCIS or LCIS

Atypical Cells

- Ductal, lobular, flat epithelial atypical hyperplasia
  - Surgical excision to rule out pathological upstaging
  - Denotes increased risk of future breast cancer development

- Oncology Referral or high risk clinic for surveillance
**Papillomas**

- Benign tumor arising from a lactiferous duct
- May contain areas of atypia
- Surgical excision is recommended

**Screening Alternatives**

- MRI
  - The good and the bad
- HALO
- Thermogram
MRI

- Indications: Lobular cancer, multi-centric disease, assess response to neo-adjuvant chemo, inconclusive films
- High risk evaluation
- Implant integrity, non-contrast

HALO - Breast Pap Test

- Nipple aspirate fluid (NAF) for cytological evaluation
- 1% of patients evaluated will reveal atypical cells
- Results inconclusive
- Cost $85: 65% patients unable to obtain NAF
**Thermography**

- Not an alternative to mammogram, in addition
- Thermal, infrared imaging
- Hormonally, temperature influenced
- No standardization of facilities or interpreters
- No biopsy availability or case controls

---

**High Risk Patient**

- Defined as individuals with:
  - Personal risk factors (ADH, ALH, DCIS, LCIS)
  - Personal history of breast cancer before 50 or bilateral
  - Family history, 1st degree relative (before 50) or male breast Ca
  - BRCA1 or BRCA2 mutation carrier
  - Personal or family history of ovarian Ca
  - Ashkenazi Jewish ancestry
High Risk Patient - Pearls

- Referral to multi-disciplinary team of providers
  - If not available, at least medical oncology evaluation for tamoxifen for risk reduction
- Genetic testing is about educating your patient
- Importance of a good and repeat CBE

Thank-you