Hands-on Clinical Breast Exam Training

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<table>
<thead>
<tr>
<th>Time</th>
<th>Event Description</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>10:00 am</td>
<td>DIDACTIC LECTURE 1</td>
<td>45-60 min</td>
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<tr>
<td></td>
<td>BREAK</td>
<td>10-15 min</td>
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<tr>
<td></td>
<td>CLINICAL BREAST EXAM ROTATION</td>
<td>50-60 min</td>
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<tr>
<td></td>
<td>DIDACTIC LECTURE 2 &amp; CASE STUDIES ROTATION</td>
<td>35-45 min</td>
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<td>12:45 pm</td>
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Hands-on Clinical Breast Exam Training

Didactic Session #1

- Breast Health History
- Simplified Risk Screening
- CBE Technique
- Documentation
TAKING A BREAST HEALTH HISTORY
Individual Learning Objectives

- Demonstrate the ability to take a relevant breast health history for women during routine well woman care
- Identify women at higher than average risk for breast cancer and initiate further evaluation and management
- Perform the steps of a complete Clinical Breast Exam
- Counsel women at average risk for breast cancer on appropriate breast cancer screening
- Appropriately document a breast evaluation, referral, and follow-up actions
- Interpret mammogram results and create a follow-up plan based on these results
Taking a Breast Health History

Three Basic Components

a) Reproductive Risk Factors
b) History of breast biopsies/radiation exposure
c) Familial/Genetic Factors
Heuristic Model ("Rule of Thumb"): BC risk is proportional to number of years of unremitting cyclic Estrogen AND Progesterone

1. Early menarche/Late Menopause (↑ RR 1.2-2)
2. Hormone Therapy w/ E+P (↑ RR 1.2)
3. Pregnancy/Breast Feeding (↓ RR 0.85)
   - First pregnancy after 30 is exception (↑ 1.2)

Hyperplasia/hypertrophy and end-differentiation of breast tissue with lactation is protective early in life (less # years for cellular errors to occur and be propagated) and increases risk later in life (more likely to have cellular errors propagated)

Breast Cancer Risk based on RRF can be estimated using the **Gail model** if ALL of the following are met:

1. Age 35 or older
2. No DCIS or LCIS
3. No strong FH of breast/ovarian cancer (need other models)
Taking a Breast Health History
Certain Biopsies/Radiation Exposure

History obtained at time of Well Woman Visit

a) History of Lobular Carcinoma in situ and/or Atypical Hyperplasia (↑ RR 4-8x)

b) History of Therapeutic Thoracic Radiation (↑) (e.g. prior Rx for Hodgkin’s lymphoma) - ↑ RR 4x
Taking a Breast Health History
Familial/Genetic Factors

- Simple screening tool (based on NCCN high risk screening rec’s)
- For use during HME, or at time of breast complaint
- If potential ↑ risk for breast cancer by screening tool ➔ refer to genetic counselor
- If referral needed, genetic counselor will perform a Comprehensive Breast Health History including:
  - Expanded Family History with use of risk assessment tables
  - Reproductive History
  - History of Environmental Exposures
- Based on risk identified in counseling, expanded screening or genetic testing (e.g. BRCA testing) may be appropriate
Genetic/Familial Screening Simplified
Simplified Screening:
Part 1: Two questions

A. Have you had breast or ovarian cancer?
B. Has a blood relative had breast or ovarian cancer?

- If answer to both questions are No, recommend average risk screening
- If answer to Q.A is yes, ask f/u questions 2.A.
- If answer to Q.B is yes, ask f/u questions 2.B.
Simplified Screening Interpretation

NO to BOTH QUESTIONS

- Follow Average Risk Screening
- Annual Mammogram starting at age 40
- Clinical Breast Exam (CBE) every 1-3 years from age 21-39, annual CBE age 40+
Follow average risk screening recommendations until genetic counseling done.

If the answer to ALL question are NO (or don’t know) ➔

Average risk screening

• CBE every 1-3 years for ages 21-39; Annually age 40+
• Mammograms annually starting at age 40
• Self breast awareness

If the answer to ANY question is YES ➔

Cancer genetic counseling
If the answer to ALL question are NO (or don’t know) →
Average risk screening

• CBE every 1-3 years for ages 21-39; Annually age 40+
• Mammograms annually starting at age 40
• Self breast awareness

If the answer to ANY question is YES →
Cancer genetic counseling
Cancer Genetic Counseling

- Uses additional tools to estimate lifetime risk of breast cancer or likelihood of single gene mutation (e.g., BRCAPRO for BRCA mutation likelihood)

- Further recommendations re: screening and risk reduction depend on the degree of risk/results of testing
  - **Surveillance:**
    - Annual MRI along with annual mammogram if lifetime BC risk is > 20-25% lifetime based on FH (i.e., NOT Gail model) beginning at age 30
  - **Risk reduction:**
    - Tamoxifen or raloxifene (>1.7% in 5 years based on Gail model)
    - Bilateral mastectomy, BSO (typically reserved for highest risk)
When to use the Breast Cancer Risk Screening Questionnaire

- Initial 2-Question Screening should be performed at initial HME or if breast complaint
- At return HME/Well Woman Exam, update answers with patient (e.g., “Any new history of cancer in the family?”)
History of LCIS or Atypical Hyperplasia on a prior biopsy → Increased Risk of Breast Cancer (RR 4-to 8-fold)

Recommendations for LCIS/ADH/ALH:

**Screening**: Annual mammogram + CBE every 6-12 months + Breast Awareness (begin at dx)

**Risk Reduction**: Consider tamoxifen x 5 years (50% decreased risk); tamoxifen or raloxifene x 5 years if menopausal
RADIATION EXPOSURE TO CHEST

- If a client has had chest therapeutic radiation ages 10-30 (e.g., treatment of lymphoma), significant increased risk for Breast Cancer
- Most were informed of this risk by their provider at that time
- Screening starts 8 – 10 years after radiation (or by age 40 whichever comes first)
  - Annual mammography/Annual MRI
  - Twice annual CBE
  - Breast self awareness
CLINICAL BREAST EXAM TECHNIQUE & DOCUMENTATION
CBE: The Purpose

- Detect and distinguish suspicious breast changes from non-suspicious findings
- Evaluate changes on breast exam found by women
CBE: When To Do It

- Well Woman Visit:
  a) 20-39 yrs old every 1-3 years (some recommendations now suggest starting at age 25 years old)
  b) 40 and older annually
- When client has breast-related physical symptoms or concern
- As part of follow-up for previous breast-related symptom
While ideal time spent performing a breast exam has not been established, studies show the longer time dedicated to CBE, the more sensitive the exam is for the detection of masses.

Larger breasts typically take longer.
CBE: Core Competencies (LACE)

1) **L**ook
2) **A**rm positions
3) **C**heck lymph nodes
4) **E**xamine breast tissue
Client seated, breasts exposed, check for:

- Symmetry
- Skin Changes
- Nipple Changes
- Dimpling
ARM POSITIONS

- HANDS RAISED ABOVE HEAD
- Check Contour

- HANDS ON HIPS
- Check for retraction
CHECK LYMPH NODES
CHECK LYMPH NODES:
Supraclavicular
CHECK LYMPH NODES:

Axillary

- Lateral axillary group
- Central (apical) group
- Subscapular group
- Pectoral group

With the arm down, these areas appear like a pyramid.
CHECK LYMPH NODES:
Axillary
EXAMINE BREAST TISSUE:
The 4 P’s

- POSITION
- PERIMETER
- PATTERN
- PRESSURE
EXAMINE BREAST TISSUE:

Position

- Supine position
- Arm placed over head
- Knees bent and fall to opposite side (Cahan) if needed for larger breasts
EXAMINE BREAST TISSUE:

**Perimeter**

- Blouse seam
- Below bra-line
- Breast Bone
- Collar Bone
- Mid-Axillary Line
EXAMINE BREAST TISSUE

Clients with Mastectomy:
- Examine same, full perimeter
- Palpate over the scar tissue
EXAMINE BREAST TISSUE:
Pressure
EXAMINE BREAST TISSUE:

Pressure
Insert Movie HERE
**BREAST EXAM FINDINGS:**

**NORMAL**

“Bilateral breasts are symmetrical, non-tender, no suspicious masses, skin or nipple changes, or lymphadenopathy are noted.”

<table>
<thead>
<tr>
<th>BREAST EXAM FINDINGS</th>
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<tbody>
<tr>
<td>Symmetry</td>
</tr>
<tr>
<td>Tenderness</td>
</tr>
<tr>
<td>Presence of Mass</td>
</tr>
<tr>
<td>Skin Changes</td>
</tr>
<tr>
<td>Nipple Changes</td>
</tr>
<tr>
<td>Lymph Nodes</td>
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</tbody>
</table>
BREAST EXAM FINDINGS: ABNORMAL

- Findings on Visual Inspection (retraction, dimpling, erythema, symmetry)
- Findings on Lymph Node exam (lymphadenopathy)
- Nipple discharge characteristics, including color, consistency, number of ducts involved, location and whether discharge is unilateral or bilateral
- Breast Mass Findings
**DOCUMENTING BREAST MASS**

<table>
<thead>
<tr>
<th>MASS DOCUMENTATION MUST INCLUDE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Location:</strong> (Drawing &amp; Narrative)</td>
</tr>
<tr>
<td>• Side (Left/Right)</td>
</tr>
<tr>
<td>• Clock Face Location</td>
</tr>
<tr>
<td>• Distance from Areolar Edge</td>
</tr>
<tr>
<td><strong>Size:</strong></td>
</tr>
<tr>
<td>2 measurements in 2 dimensions</td>
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</tbody>
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## ADDITIONAL COMPONENTS OF MASS DOCUMENTATION SHOULD INCLUDE

<table>
<thead>
<tr>
<th>Shape:</th>
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<tbody>
<tr>
<td>• Round</td>
</tr>
<tr>
<td>• Oval</td>
</tr>
<tr>
<td>• Irregular</td>
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</table>

<table>
<thead>
<tr>
<th>Tenderness:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Tender</td>
</tr>
<tr>
<td>• Non-Tender</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Margins:</th>
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</thead>
<tbody>
<tr>
<td>• Well-Defined</td>
</tr>
<tr>
<td>• Ill-Defined</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Consistency:</th>
</tr>
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<tbody>
<tr>
<td>• Soft</td>
</tr>
<tr>
<td>• Firm</td>
</tr>
<tr>
<td>• Rubbery</td>
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</tbody>
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<table>
<thead>
<tr>
<th>Mobility:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Fixed</td>
</tr>
<tr>
<td>• Mobile</td>
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</table>
“Bilateral breasts are symmetrical, no skin changes, or lymphadenopathy are noted. A 1.5 cm x 1 cm mass was found in the left breast at 10:00, 5cm from the areolar edge. The mass is well-defined, soft, mobile, non-tender.”
Didactic Session #2:
- BI-RADS System
- Interpretation of Abnormal Results
BIRADS SYSTEM & INTERPRETING ABNORMAL RESULTS
REVIEWING BREAST IMAGING RESULTS

While reviewing:

- Be able to interpret imaging results
- Have access to the Clinical Breast Exam findings to compare the results of CBE to imaging
- Know when to refer for further testing and/or referral
THE BI-RADS SYSTEM

- Screening Mammography – Standard 2 views
- Diagnostic Mammography – Used when women have symptoms. *Frequently requires* other imaging modalities (e.g., U/S, special views)

Comprehensively documenting and relating the findings of a physical examination or significant patient history (e.g., “strong family history of breast cancer”) to the radiologist is a critical element in a thorough evaluation of every mammogram.
Required that all mammography units use the SAME system throughout the U.S.

Same system applies to all breast imaging (mammography, U/S, MRI)

5 functional categories
## FUNCTIONAL BI-RADS CATEGORIES

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>SYNONYM</th>
<th>RISK</th>
<th>ACTION</th>
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<tbody>
<tr>
<td>1</td>
<td>No abnormal findings; Negative</td>
<td>Low</td>
<td>Routine follow-up</td>
</tr>
<tr>
<td>2</td>
<td>Benign (lesion IS seen but is c/w benign process)</td>
<td>Low</td>
<td>Routine f/u</td>
</tr>
<tr>
<td>3</td>
<td>Probable benign</td>
<td>&lt; 2% likelihood of cancer</td>
<td>6 month unilat f/u; then q 6 – 12 month f/u x 1-2 yrs</td>
</tr>
<tr>
<td>4</td>
<td>Suspicious</td>
<td>3 - 94% (some break up into Cat A, B, C)</td>
<td>Refer for biopsy</td>
</tr>
<tr>
<td>5</td>
<td>Highly suspicious</td>
<td>≥ 95% likelihood of cancer</td>
<td>Refer for biopsy</td>
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BI-RADS-0: INCOMPLETE

- Means that additional Imaging is required
- From a Screening Mammogram
BIRADS-1: NEGATIVE

- Symmetrical Breasts
- No Masses or Suspicious Findings
- Routine follow-up recommended if done as screening mammography
- If a clinical mass is present?
  - A BI-RADS 1 imaging result still requires additional follow-up
  - #1 CAUSE OF MALPRACTICE IN DELAYED BREAST CANCER DIAGNOSIS
BI-RADS-2: BENIGN

- Normal Findings
- Description of benign findings included
- No evidence of malignancy
- No further evaluation needed
- Routine follow-up
BI-RADS-3: PROBABLY BENIGN

- < 2% likelihood that the imaging finding is associated with cancer (hence the term “probable benign”)
- Short-term follow-up needed: follow radiologist recommendation
- Usually a 6 month f/u, with continued 6-12 month imaging f/u for 1-2 years
- Tracking system must be in place
- OK to refer to breast specialist if client very anxious
- OK to follow at PP Basic Breast Services if CBE was normal
BI-RADS-4: SUSPICIOUS

- Tissue biopsy is recommended
- Biopsy typically done under image guidance
- Referral to breast specialist appropriate
- 3-94% likelihood of being malignant
  - 4A: 3-10% likelihood of malignancy
  - 4B: 11-50% likelihood of malignancy
  - 4C: 51-94% likelihood of malignancy
- Tracking system must be in place
BI-RADS-5: HIGHLY SUGGESTIVE OF MALIGNANCY

- Tissue biopsy is recommended
- Biopsy typically done under image guidance
- >95% likelihood of cancer
- Immediate referral and action appropriate
BIRADS FOLLOW-UP OF SCREENING MAMMOGRAPHY

Results of Screening Mammography

- BI-RADS 1, 2: Routine follow-up
- BI-RADS 0, 3: Provide CBE if not previously done and client is due.
- BI-RADS 4, 5: Refer to outside breast specialist

- Negative CBE: Follow recommended short interval follow-up as suggested in radiology report.
- Positive CBE: refer or follow Algorithm C, Palpable Mass
Questions?

Thank YOU