Primary Health Care Initiatives (PHCI) Project Contract No. 278-C-00-99-00059-00 Abt. Associates Inc.

# **BREAST DISORDERS**

### LEARNING OBJECTIVES

- Significance and evaluation of breast complaints
- Epidemiology of breast diseases
- Describe the diagnostic evaluation and initial management of breast lumps
- Review the benign breast disease, its etiology and treatment
- Screening for cancer of the breast
- Identify high risk groups for breast problems

# EQUIPMENT AND MATERIAL NEEDED

- Over head projector
- Flip Chart and markers

#### **LEARNING POINTS:**

- Breast pain (mastalgia)
  - Very common in pre-menopausal women
  - May be cyclic (60% related to menstrual cycle) or non-cyclic
  - Common causes of cyclic breast pain:
    - o Hormonal changes
    - o Fibrocystic breasts
  - Common causes of non-cyclic breast pain
    - o Costochondrititis
    - o Chest wall pain
    - o Trauma
    - o Breast cancer
  - History and evaluation of breast pain
    - o Age of patient (generally non-malignant in patient <40 years)
    - o History of trauma, breastfeeding
    - o Relationship to menstrual cycles
    - o Relationship to movement of arms or chest wall
    - o Palpation of breast presence of nodularity, tenderness in breast, breast mass
    - o Palpation of chest wall presence of tenderness in chest wall
  - Management of breast pain (no masses palpable)
    - o Cyclic properly fitted brassiere, low fat diet, caffeine avoidance, Vitamin E supplementation, mammogram in women >40 years, consider low dose oral contraceptives if appropriate
    - o Non-cyclic NSAID for chest wall tenderness, mammogram in women > 40 years
    - o Refer to specialist if no relief from above measures
- Nipple discharge

- Bilateral discharge non-bloody
  - o Common causes physiologic (post breast-feeding), medications (antipsychotics, Aldomet, cimetidine, antidepressants, oral contraceptives), nipple stimulation, irregular menses
  - o Dangerous causes tumor of pituitary (headache, high prolactin, irregular menses), thyroid disease (hypothyroidism)
  - o Evaluation should always include complete breast palpation, and mammogram in women > 40 years, absence of blood in discharge
  - o Management modify medications, reassurance
- Unilateral discharge
  - o Common causes if non-bloody ductal papilloma, ductal ectasia, fibrocystic breast disease, eczema
  - o Dangerous causes, especially if bloody ductal or breast carcinoma, eczema, Paget's disease (malignant disease of nipple)
  - Evaluation should always include complete breast palpation, and mammogram in women > 40 years. May require surgical excision of involved duct. Note cytology of breast fluid very rarely helpful, unless discharge is bloody

#### Breast mass

- Significance of breast mass in any woman:
  - o Take it seriously in any age woman
  - o Follow up closely and often
  - o Learn about possibilities of the local referral
  - o Communicate closely and carefully with patient
  - o Physician must be the patient's advocate through the whole process
- Common causes in women < 40 fibrocystic changes (single or multiple cysts very common), fibroadenoma, previous scar from trauma or infection, breast cancer (less than 10% risk)
- Common causes in women > 40 breast cyst, breast cancer
- Risk factors for breast cancer
  - o Unilateral, non-cyclic pain
  - o Unilateral, bloody nipple discharge
  - o Age > 40
  - o Obesity
  - o Nulliparity
  - o Absence of history of breast feeding
  - o Family history of breast cancer (especially 1<sup>st</sup> degree relatives)
  - o History of endometrial or ovarian cancer
- History in woman with breast mass ask about:
  - o Age risk of cancer greater if > 40 years
  - o Pain or tenderness to palpation more common with cysts than with cancer
  - o Nipple discharge unilateral or bloody discharge suggests papilloma, may be benign or malignant
  - o Similar, mirror-image mass in opposite breast suggests benign fibrocystic disease
- Palpation of breast mass
  - o Technique use flat part of fingers, use powder or soap solution to allow fingers to slide smoothly over skin, palpate breast in systematic fashion to not miss any part, check nipples for discharge or skin changes

- Always palpate axillary lymph nodes (palpable nodes suspicious for cancer) and axillary tail of breast
- o Findings suggestive of malignancy single mass, immobile, fixed to chest wall, rock hard, irregular borders, overlying skin changes of thickening or dimpling or redness, non-tender to palpation, palpable lymph nodes in axilla
- o Findings suggestive of benign mass multiple masses, similar mass in opposite breast, tender to palpation, mobile, smooth borders, dense but not rock hard
- Evaluation of breast mass Triple diagnosis
  - 1. Breast palpation (clinical breast exam)
  - 2. Mammogram
  - 3. Fine needle aspiration (FNA) with cytology of aspirate
  - o Ultrasound often used in addition, especially in younger women, to evaluate for possibility of breast cysts
  - o In general, any woman with a palpable, dominant breast mass must be referred to specialist to begin triple diagnosis process.
  - o Any abnormality in any of three parts of triple diagnosis should be further evaluated by biopsy core needle or open biopsy
  - o A woman > 40 years, with a negative triple diagnosis, or with a negative biopsy, should be reevaluated with mammogram every year.

#### PREVENTION ISSUES AND HEALTH EDUCATION MESSAGES:

- Breast cancer screening is important, especially in women with one or more risk factors
- Screening in women < 40 years teach Breast Self-Examination (BSE), clinical breast exam every 1 to 2 years by physician or midwife
- Screening in women > 40 years teach BSE, clinical breast exam every year by physician or midwife, mammogram every 1-2 years beginning > 50 years of age
- Emphasize that:
  - All lumps are not cancerous, but do need to be evaluated for possible cancer
  - Important to seek out medical advice if lump is detected on BSE
  - Men and adolescents can occasionally get breast cancer
  - Breast cancer detected in early stage can be cured >90% of cases

# CRITICAL ELEMENTS OF COMPETENCE FOR EVALUATION

- Signs of possible malignancy in a breast lump
- Understanding the importance to do a physical examination of the lump
- Proper method of examination of breast by provider
- Proper method of teaching Breast Self-Examination (BSE)
- When to refer to a specialist