Breast and Axillae

Review Anatomy of the Breast

- **Surface anatomy**
  - Location of breasts on anterior chest wall
    (from clavicle and 2nd rib to the 6th rib & from sternum to the MAL)
  - Tail of the Breast extend toward the anterior axillary fold
  - Nipple and areola (brownish area surrounded the nipple)
- **Internal anatomy**
  - **Glandular tissue**
    - consist of Lobes, lobules, and alveolar gland and ducts
    - Drain into milk producing ducts and sinuses that open into areola
  - **Fibrous tissue**
    - in form of Suspensory ligaments or Cooper’s ligaments provide support
  - **Adipose tissue**
    - or fat tissue surrounds the breast in superficial and peripheral area
4 quadrants
- Upper inner
- Lower inner
- Upper outer
- Lower outer

Male Breast:
Consist of small nipple and areola overlie a thin disc of undeveloped breast tissue
Lymphatics:

- **Axillary nodes**
  - **Central axillary nodes**
    Lies along the chest wall, high in the axillae, midway between anterior and posterior axillary fold (frequently palpable)
  - **Pectoral (anterior)**
    Along the lower border of the pectoralis major inside the anterior axillary fold
  - **Subscapular (posterior)**
    Along lateral border of the scapula palpable deep into the posterior axillary fold
  - **Lateral**
    Located along the upper humerus
- **Drainage patterns**

  PLN, SSLN, Lat LN drain into the central one which then drain into infraclavicular and supraclavicular

- **Developmental consideration**

  Review table 778 – 779.

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**Health History Questions**

**Common concerns**

- Breast lump or mass
- Breast pain or discomfort
- Nipple discharge

  - Ask the pt if she do BSE? How often? At what time did she examine hear breast during menstrual period?

  - Ask if there is any discomfort, pain or lump?
  Ask about precise location, from how long it has been present, if there is any change in size or variation with MC?

  - Ask if their any discharge from the nipples?

    Galactorrhea (milky discharge bila) indicate pregnancy or prolactein imbalance
Ask also if the discharge is spontaneous or with stimulus
Ask about color, consistency, quantity, unilateral or bilateral
  e.g. spontaneous persistent nonlactating discharge that is bloody ------ papilloma
Ask about previous surgery, if there is rashes, last mammogram
Ask if there are lumps, tenderness, rashes in axillae

Technique of examination

- Inspect while pt in sitting position and disrobed to the waist
- Inspect in 4 views
  1. Arms at side
  2. Over head
  3. Pressed against hips
  4. Leaning forward

- Equipment needed
  - Small pillow
  - Ruler marked in centimeters
  - Pamphlet or teaching aid for BSE
- **Arms at side:**
  - inspect the appearance of the skin including color, thickness & unusually prominent pores
  - e.g. redness ------ local inflammation thickness and prominent pores ------ **breast cancer**
  - Size and symmetry of the breast
  - Contour (look at masses, dimpling, or flattening)
  - e.g. flattening of convex breast ---- **cancer**
  - ch.ch of the nipple (size, shape, direction, rashes, ulceration, or any discharge)
  - Normal shape of the nipple inverted e.g. asymmetry in direction ------ **cancer**
  - rashes or ulceration ------- paget’s disease of breast retraction( fixed flattening or depression)
  - e.g. retraction and thickness in nipple ------ **cancer**

- **Other position used to bring out dimpling or retraction that may be invisible, inspect contour of the breast in each position**
- **Test for dimpling by drawing the skin inward**
**Palpation of the breast:**
- While pt in supine position, use finger pads of 2\textsuperscript{nd}, 3\textsuperscript{rd}, 4\textsuperscript{th} fingers keeping them slightly flexed
- We can use circular and vertical strip pattern

**To examine the lateral portion of the breast:**
- Ask pt to roll on the opposite hip
- Place her hand over hear head keeping the shoulder against examining table
- Begin palpation in the axillae moving in straight line to the bra line
- Then up to the chest---- clavicle --- nipple.
To examine the medial portion of the breast:
- Ask pt to lie with her shoulder flat against the bed
- Place her hand at her neck, raise her elbow to be even with her shoulder
- Palpate in straight line from the nipple to bra line then to the clavicle and midsternum

While you palpate the breast note
1. The consistency of the tissue
   e.g. tender cords ----- mammary duct ectasia
2. Tenderness
3. Nodules (location, size, shape, consistency, delimitation, tenderness, mobility)

Nipple palpation
Note it’s elasticity

Male breast:
Inspect it for nodules, swelling, ulceration, palpate for nodule
Axillae

Axillae can be examined while pt in lying down but sitting is better

**Inspection:**
Skin of each axillae should examined for rashes, infection, unusual pigmentation

**Palpation:**
- To examine Lt axillae ask pt to relax with Lt arm down, support Lt wrist of the pt with your Lt hand, use your Lt hand to examine the Rt axillae.
- Cup together the fingers of your Rt hand and reach high toward the apex of the axillae.
- To examine the central node press your finger in toward the chest wall.
  - For the pectoral node (grasp the anterior chest wall between your thumb and finger with your finger palpate inside the border of pectoral muscle).
  - For lateral group (feel along the upper humerus)
  - For Subscapular node (step behind the pt feel inside the posterior axillary fold)
  - Feel supraclavicular & infraclavicular LN
Assessment of spontaneous nipple discharge if there is a HX. Compress the areola with your index finger watch for any discharge, note: color, consistency, quantity, exact location.

Examination of the mastectomy patients.....Lymphedema may be present in the axillae.

Teach the pt BSE.
Breast Self Examination

- In premenopausal women, examination should occur **5 to 7 days after the menstrual cycle begins, or 3 to 5 days after it ends.** In postmenopausal women, BSE should be performed **on the same day each month**—**such as the first day of the month, the patient’s birthday, or another meaningful day**—so that the patient will be reminded. The patient should report unusual findings to her healthcare provider.
Abnormal Findings

- Signs of retraction and inflammation
  - Dimpling
  - Edema Nipple retraction
  - Fixation
  - Deviation in nipple pointing

- Breast lump
  - Benign breast disease (formerly fibrocystic breast disease)
  - Cancer
  - Fibroadenoma

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THANK YOU

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