Breast Examination

Important Note: There is wide acceptable variation in the approach to breast examination. The notes below summarise just one of these: the approach of two students to a clinical skill station in an OSCE. This assumes that the examiners are acting as chaperones.

1. Introduce yourself to the patient
   ie. “Hello, my name is …… Is it ok if I examined you?” You may then include the following points:
   - I’ve been asked to perform a breast examination.
   - If at anytime you feel any discomfort or would prefer me to stop, just say so.
   - If you have any questions, please do ask me.

2. Position, exposure and hands washed
   Turn to examiner and say: “I would like to ensure….
   - The patient is in the correct position, lying at 45º.
   - The patient is adequately exposed, from the thorax to the abdomen
   - That my hands are washed.”

Breast examining technique: several different approaches. Each surgeon has a favourite. We have been taught the lawn mower approach (see below).

3. Inspection
   Look for any obvious abnormalities:

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<th>Mnemonic: PASS D IF</th>
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<td>- Peau d’orange (orange peel skin) – due to lymphatic obstruction</td>
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<td>- Asymmetry (breast are meant to be asymmetrical)</td>
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<td>- Skin changes ie. erythematous tissue</td>
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<td>- Scars</td>
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<td>- Discharge from nipple (seen)</td>
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<td>- Inversion of the nipple</td>
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<td>- Fungating lesions = brown lesion protruding from the breast = Late stage carcinoma of the breast</td>
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Looking for any obvious scars and comment on these:
   - Lumpectomies – little small scars from lipoma, sebaceous cyst or benign lesion of the breast
   - Wide local excision scars – Bigger scar than lumpectomy
   - Mastectomies – Diagonal scar

Manoeuvres:
Say to patient: “Can you raise your arms and hand like this and hold them up and slowly bring them down.”

Whilst they are doing this – Look at the breast for any obvious:
   - Tethering of the skin to any underlying mass (ie. like a sebaceous cyst which is attached to the skin at the punctum)
   - Look at armpits for any axillary clearance scars

The patient brings her hands back down.
   - Ask her to put both hands on hips and press really hard on the hips
   - Look for any extrusion of any mass on activation of pectoralis major.
If none, say: “No obvious extrusion of any mass on activation of pectoralis major.” This is looking for masses that are tethered to underlying muscle. (N.B: Extrusion = Something sticking out)

4. Palpation
- Say to patient “Can you show me the area of concern?”
- If no area of concern, then examine the breast closest to yourself.
- If yes, examine the normal breast first and when you get to the breast causing concern, start palpating from a point furthest from this area

- Ask patient to put one hand behind the head (hand on the side that breast is being examined) and the other hand keep flat on bed. N.B: If breasts are very large and pendular, then patient may be positioned flat on her back (This spreads breast tissue across chest wall.)

Before beginning palpation – just remind patient that she can ask to stop the examination at any time if uncomfortable.

- Ask patient “Is there any pain or tender area?”
- Put one hand on patient’s shoulder
- Palpate in a “lawn mower” style

The breast has 4 quadrants and a central portion (areolar area ie. nipple area)
- Start with the breast without the lump and with fingertips closely together; gently probe each breast in the pattern shown below. Palpate each quadrant!
- To examine the outer quadrants of the breast being examined, ask the patient to place her hand behind her head.
- To examine the inner quadrant of the breast being examined, ask the patient to place her hand at her side.

The lawn mower approach to palpation:
4 Quadrants of the breast:

A = upper outer  
B = upper inner  
C = lower outer  
D = lower inner

Peri-areolar area = Nipple area

- You may wish to say as you are palpating “Lower inner quadrant, upper inner quadrant” etc.
- Then palpate the peri-areolar area (around nipple) = 5% of Ca Breast is located here.
- Then raise the breast and palpate the infra-mammary fold (just under breast)
- Then examine the axillary tail

**Axillary Lymph nodes:**

- Then ask patient to rest their right arm on your right forearm. Now examine the axillary lymph nodes.
  - The nodes lie in a pyramid shape:
  - Palpate the:
  - Medial wall (seratus anterior)
  - Lateral wall (body of humerus)
  - Anterior wall (pectoralis major)
  - Posterior wall (latissimus dorsi)
  - Apices (arch of armpit – high in the head of the humerus)

- As you are palpating, say out loud the 5 areas of the axillary lymph nodes.
- Try and relax all the muscles in that area so that it is easy to palpate the lymph nodes in the axillary area. (say to patient “relax your arm, please”)
  - Do the same for the other (Left) breast and axillary lymph nodes (Left hand to left hand) again using a lawn mower approach

**Now you have FOUND a LUMP,** whilst palpating the breast tissue!
- What do you do?

**Talk about the:**
  - Site - 1
  - Shape - 2
  - Surface - 3
  - Size - 4
  - Temperature
  - Tetherring (attached to anything) – 5 (most important T)
  - Transilluminability
  - Texture
  - Colour
  - Consistency
  - Capillary – pulsatility and expansility

So ensure that you talk about the size, shape, surface, site and fixility of the lump. These are the 5 most important factors that have to be mentioned when describing and examining a lump!!!

**Discharge**
Say to the patient "Can you express any discharge from the nipple?"
If yes – then ask them to demonstrate this.

**Next- palpate for any fixation to skin and underlying muscle:**
Find the breast lump:
  - Try to move the skin over the lump
  - Eg. Look at ulnar styloid = a lump – pick up skin over it – is it fixed? No it is not! (Skin is loose over it – this is what non-fixated skin feels like)
- Now you want to find out whether the lump is attached to any underlying muscle –
- Ask the patient to put her hand on hip (hand on the side that has lump on the breast), while you hold the lump with your fingers and try to move it from side to side checking its mobility before and after activation of pectoralis major.
- When I say press very hard on your hip with your hand – Look at the lump:
  - If the lump stops moving = Lump is attached to underlying muscle
  - If it doesn’t stop moving = then it is not attached to the muscle.

The examiner may ask you to stop here and ask about your findings:

1) Firstly – you don’t have the right to say that this is a cancer
2) Say to examiner “To find out more about this lump, I would like to complete my examination by checking other organ systems”. 
3) I would like to percuss the spine for any spinal tenderness – Any pain, if yes – could be a wedge, osteoporotic lesion or 2ndary spread to the spine.
4) I would like to percuss the bases of the lung for any obvious stony dullness ie. Pleural effusion (Mets to lungs)
5) And I would like to examine the abdomen for any hepatomegaly."

(Remember - Breast cancer spreads to chest, spine and liver)

Then indicate that the examination is the first part of TRIPLE ASSESSMENT!

“The triple assessment includes a full history and examination, mammography or radiographic imaging (US) and finally fine needle aspiration.

Risk factors: are major, moderate or minor

- Major: BRACA 1 & BRACA 2 gene, immediate FH, Breast Ca in the other breast
- Moderate: Early menarche, late menopause, use of HRT, use of pill
- Minor: Slender (higher risk) smoking, drinking ie unhealthy lifestyle

Important Note
These notes were written by two medical student in 2004. They are presented in good faith and every effort has been taken to ensure their accuracy. Nevertheless, medical practice changes over time and it is always important to check the information with your clinical teachers and with other reliable sources. Disclaimer: no responsibility can be taken by either the author or publisher for any loss, damage or injury occasioned to any person acting or refraining from action as a result of this information.

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