

# **Breast 3**

***( History taking & Examination )***

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# Breast History Taking

# # Age and sex :

Try to **correlate** the age of the patient presentation with the most common pathology encountered in this age group,

## Examples:

- o After birth: mastitis neonatorum.
- o At puberty: pubertal mastitis.
- o Adolescence: hard fibroadenoma.
- o Childbearing period: soft fibroadenoma, duct papilloma.
- o Carcinoma occurs at any age after puberty.

# # Complaint :

The chief complaints are : swelling, pain, and nipple discharge.

## >> Swelling (lump) :

### Ask about :

- \* Mode of onset
- \* Duration and rate of growth (course). Long duration with slow rate of growth usually indicates benign lesions.
- \* Associated manifestations suggesting inflammatory process ( redness, fever, rigors)
- \* Associated manifestations suggesting specific infection (mainly T.B.)
- \* Risk factors for malignancy (hormonal, irradiation, family history, etc.)
- \* Manifestation suggesting metastatic disease (dyspnea, jaundice, headache, jaundice, bone pains, etc.

## >> Pain :

- \* **SOCRATES** approach
- \* Usually, pain is associated with inflammatory lesions as acute mastitis
- \* Fibrocystic disease is characterized by cyclic pain (mastalgia) that is related to menstruation.
- \* Tumors (benign or malignant) are painless
- \* Carcinoma is painless in early stages and painful in advanced stages with local invasion.

## **>> Nipple Discharge :**

### **Ask about :**

- \* Amount ( Minimal or Profuse ).
- \* Colour & Character :
  - Bright red blood: duct papilloma / duct carcinoma
  - Purulent: abscess.
  - Milky: galactocele.
  - Serous: Fibrocystic disease.
  - Cheesy : duct ectasia.
- \* Unilateral or bilateral.
- \* Uni-ductal or multi-ductal.
- \* Spontaneous or induced with squeezing.

# # Past history :

## Ask about :

- \* Menstrual history ( including **Menarche**)
- \* Marital state.
- \* Number of pregnancies & miscarriages.
- \* History of lactation.
- \* History of breast trauma.
- \* History of previous troubles ( diseases, surgeries ) in the breast.

## # Breast History Taking Checklist :

introduction		A	B	C	mark
1	Greeting the patient				
2	Self introduction				
3	Permission and establishing a plan for the visit				
Breast lump history		A	B	C	mark
4	Age of the patient				
5	Site (which quarter and relation to the nipple)				
6	Duration (when the lump was discovered)				
7	Onset ( how the lump was discovered)				
8	Size ( any changes in size )				
9	pain				
10	Skin changes				
11	Nipple changes ( shape or discharge and color of discharge )				
12	Breast size or shape changes				
13	Axillary lumps				
systemic symptoms		A	B	C	mark
14	fever				
15	Head ache				
16	Shortness of breath				
17	Back ache				
19	Weight loss				
Menstrual and obstetric history		A	B	C	mark
20	Age of menarche				
21	Menses ? menopausal?				
22	Contraceptive pills or hormonal therapy				
23	parity				
24	Breast feeding				
25	Family history				
Finishing		A	B	C	mark
26	Thanking the patient				

# Breast Examination

## Exposure of these patient :

Patient should be undressed down to the waist

## Positioning of these patient :

>> Two complementary positions are used for breast examination :

- **Sitting upright** “especially during inspection” :

This position makes the breasts pendulous”.

- **Lying supine with head of the bed raised 45 degrees :**

This position is the best compromise between lying flat which makes the breasts fall sideways.

# # Inspection :

>> Stand in front of the patient while she is in the sitting position and resting the hands on the thighs.

## >> Size and symmetry :

The two sides **must be compared, examining the normal side first.**

- \* There is enormous variation within individuals
- \* It is quite normal for there to be a difference between the sides.
- \* However, any marked size difference of recent onset is likely to be caused by significant pathology.



## >> Shape and contour :

Whether the breast has normal shape or Disfigured.



## >> Visible swelling :

Comment if there is any visible swelling on inspection (number, shape and size).



## >> The breast skin :

Observe if there is any :

- \* Redness
- \* Dilated veins
- \* Scars
- \* Peau de'orange:

Cutaneous lymphatic edema. Where the affected skin is tethered by the sweat ducts where it cannot swell, leading to an appearance that resembles orange skin. “it can be a sign of malignancy”

- \* Puckering (wrinkling) due to skin fixation by tumor.
- \* Dimpling (ligaments of cooper invasion).
- \* Nodules.
- \* Ulceration.



peau d'orange



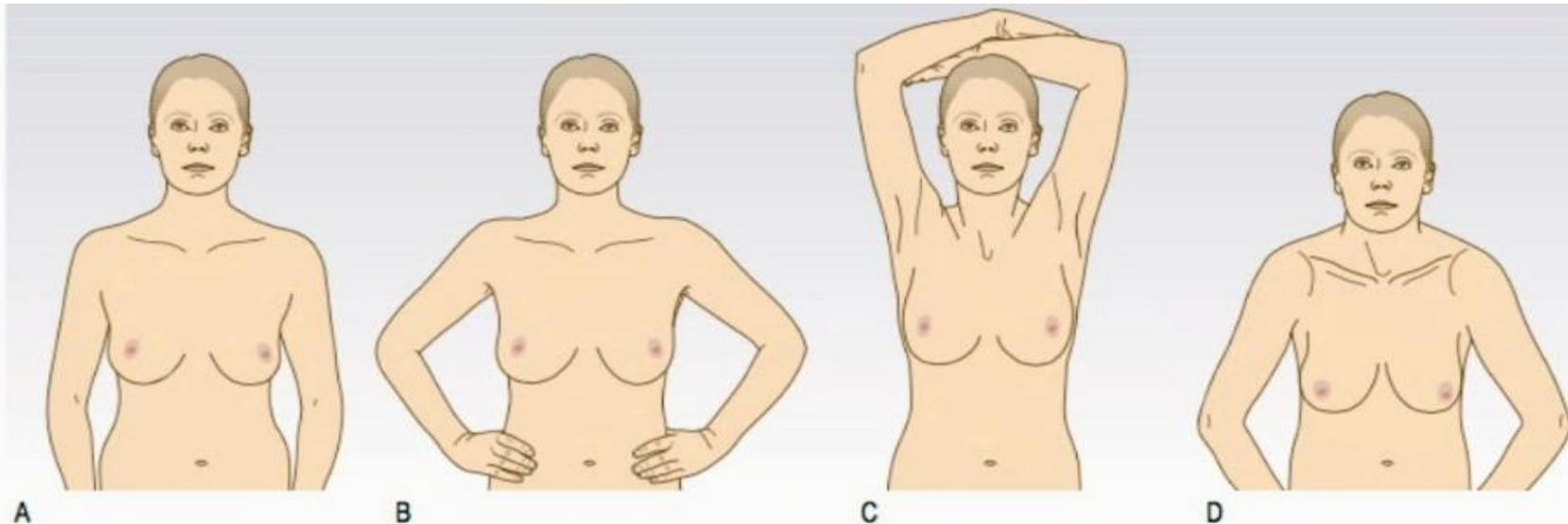
puckering



dimpling

**>> Ask the patient to do some maneuvers that may help in making these signs more visible :**

- \* Ask the patient to press her hands firmly on her hips to contract the pectoral muscles and inspect again, this may reveal previously invisible swelling.
- \* Ask her to slowly raise her arms above her head, as skin changes become more apparent particularly tethering to a carcinoma, and to enable to expose the underside of breast,
- \* Ask her to lean forward to expose the whole breast and exacerbate skin dimpling.
- \* Inspect axillary tail for visible swell



**Fig. 10.12** Positions for inspecting the breasts. (A) Hands resting on thighs. (B) Hands pressed on to hips. (C) Arms above head. (D) Leaning forward with breasts pendulous.

**>> The nipples and areolae: (4 Ds) :**

Observe if there is any:

**\* Depression (Retraction or Inversion) :**

It may be congenital. Recent inversion raises the suspicion for malignancy.

**\* Deviation :**

If it is deviated from the normal direction.

The normal nipple points forwards, slightly outwards and downwards.

Note if the nipple is :

Not prominent

Displaced

Deviated

**\* Destruction :**

> As in “Paget’s disease of the nipple”

➤ Compare findings to eczema and cracks of the nipple.

**\* Discharge :**

> If there is not spontaneous discharge, ask the patient to squeeze her nipples and note if there is any nipple discharge.

> If present comment on the same way of history (refer back)



## **>> Axilla :**

\*\* Inspect the axilla and observe if there are any visible swellings

## **>> Arm :**

>> Inspect the arm for swelling “lymphedema”



# # Palpation :

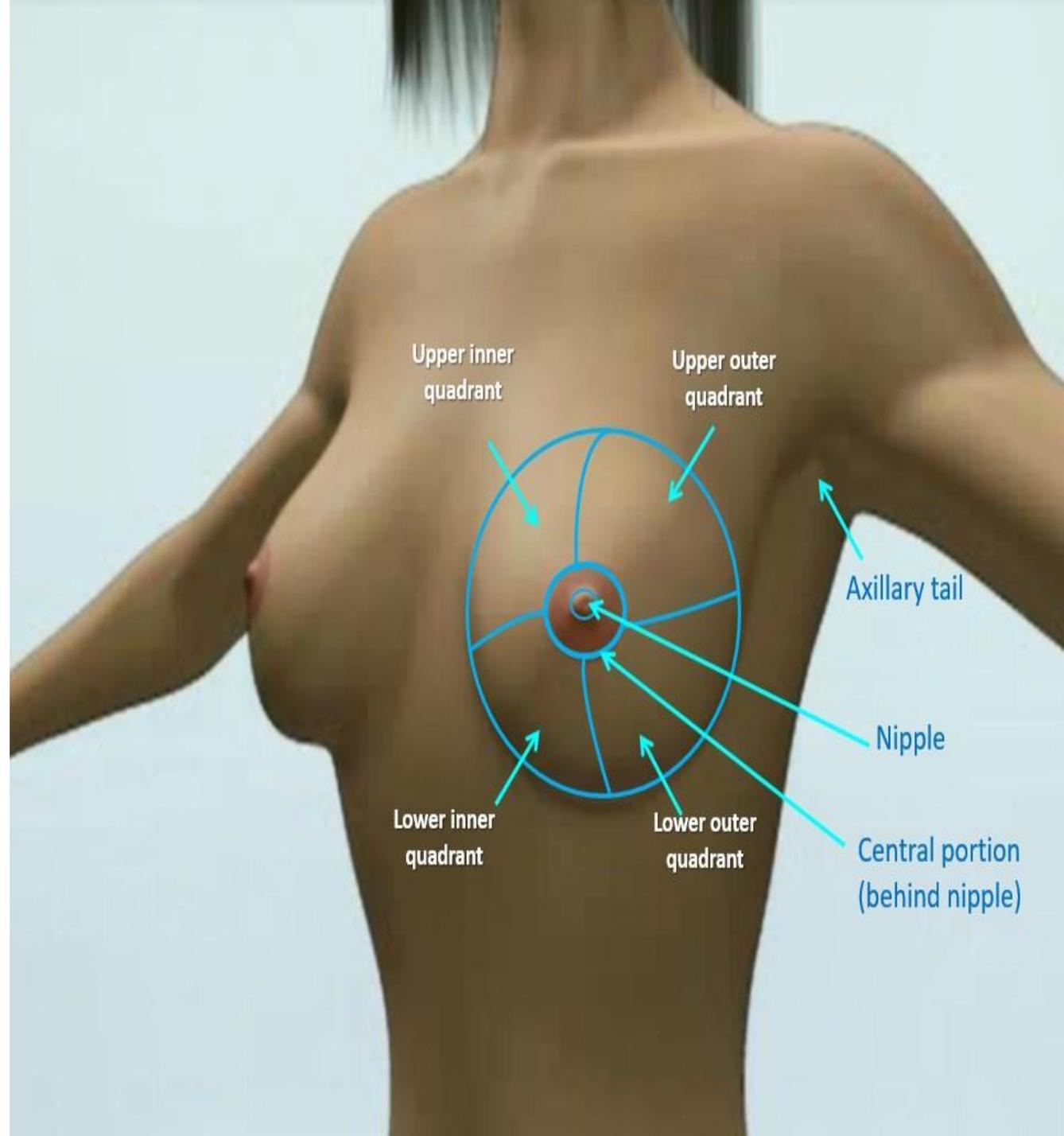
- Palpation of the breast should be performed with the patient **lying at about 45 degrees** on the couch with the hands by her sides
- Ask the patient if there is **any pain or tenderness**—and examine that area last. Also ask her to tell you if you cause any pain during the examination.
- You should **begin** the examination **on the asymptomatic side**, allowing you to determine the texture of the normal breast first.
- Palpation should be performed by keeping the **flat of the fingers** and gently rolling the substance of the breast against the underlying chest wall.
- Most breasts will feel ‘lumpy’ if pinched. Do not use ‘the flat of the hand’ this is wrong, use the fingers, which are far more sensitive.
- In **fibrocystic disease**, a nodular texture of the breast is often palpable by fingers but not by the flat of the hand



- You should proceed in a systematic way to ensure that the whole breast is examined

>>> Four breast quadrants :

- \* Upper outer
  - \* Upper inner
  - \* Lower inner
  - \* Lower outer
  - \* Retro-areola region “ Central “
  - \* Axillary tail: lies over the anterior axillary fold.
  - \* Inferior aspect of the breast “ in case of large sized breast “.
- Observe if there are abnormal swelling palpated in these areas.



- If there is **any swelling “Lump” felt**, proceed for systematic examination of the swelling “refer Back to the lump examination” and **comment on**:

- \* **Site** :

Locate in which quadrant.

- \* **Size**

- \* **Shape**

Wedge shaped: milk engorgement.

Globular: cyst or fibroadenoma.

Irregular: carcinoma.

- \* **Surface** :

Smooth: benign

Irregular: carcinoma.

- \* **Edges** :

Well defined & regular: benign

Ill defined & irregular: carcinoma.

\* **Consistency** :

Cystic.

Firm.

Hard.

Stony hard: it is very important sign of malignancy.

\* **Warmth** :

Present over inflammatory swellings, sometimes carcinoma or sarcoma.

\* **Tenderness** :

The more tender the lump is the less likely to be malignant.

\* **Relation to overlying skin:**

Try to move the swelling and test for skin fixation, if a lump is tethered to the skin, it behaves as if it is tied to it, the mass cannot be moved without moving the skin. (skin pinching test )

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**\* Mobility :**

Within the breast tissue by holding the breast in one hand and moving the lump by the other hand.

>> Carcinoma: the tumor is fixed in its bed

>> Fibroadenoma: freely mobile within the breast tissue (breast mouse).

**• In relation to the underlying muscles :**

>> The lump may be fixed to the underlying muscle, where it can be moved to some degree if the muscle is relaxed but are less mobile if the muscle is tensed.

>> Pectoralis major muscle:

**Ask** the patient to rest her hand on her hip with the arm relaxed.

**Hold** the lump between your thumb and forefingers and test its mobility by moving it in two planes at right angles to each other (e.g. up/down and left/right).

**Ask** the patient to press her hand against her hip causing contraction of the pectoralis major.

**Feel** the anterior fold of the axilla to verify the pectoralis major is fully contracted

**Repeat** the mobility testing and comment.

**Any** restriction in mobility indicates adherence to the pectoral fascia & pectoralis muscle

>> Serratus anterior :

- Tumors in the lower outer quadrant lie on the serratus anterior.
- It should be put in contraction to test mobility of these tumors.
- This is done by asking the patient to place outstretched hand upon your shoulder and press hard.

**\* In relation to the chest wall :**

- o Fixity to the chest wall results in loss of all mobility irrespective of muscular contraction.

# # Palpation of The Axilla

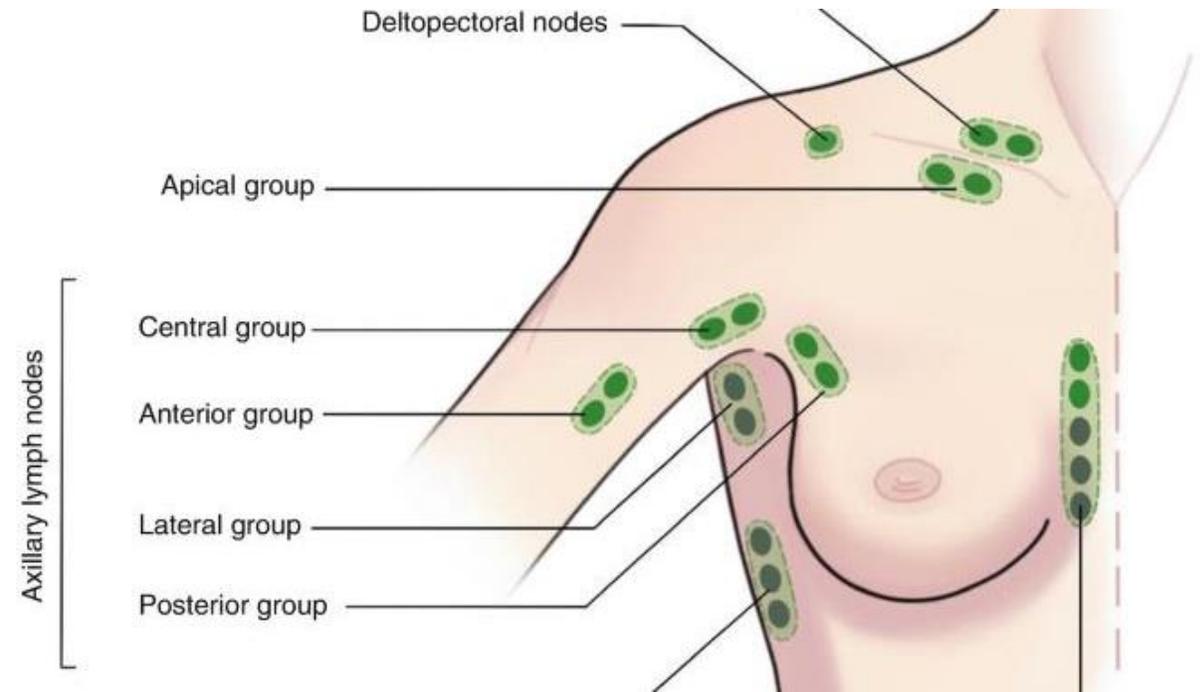
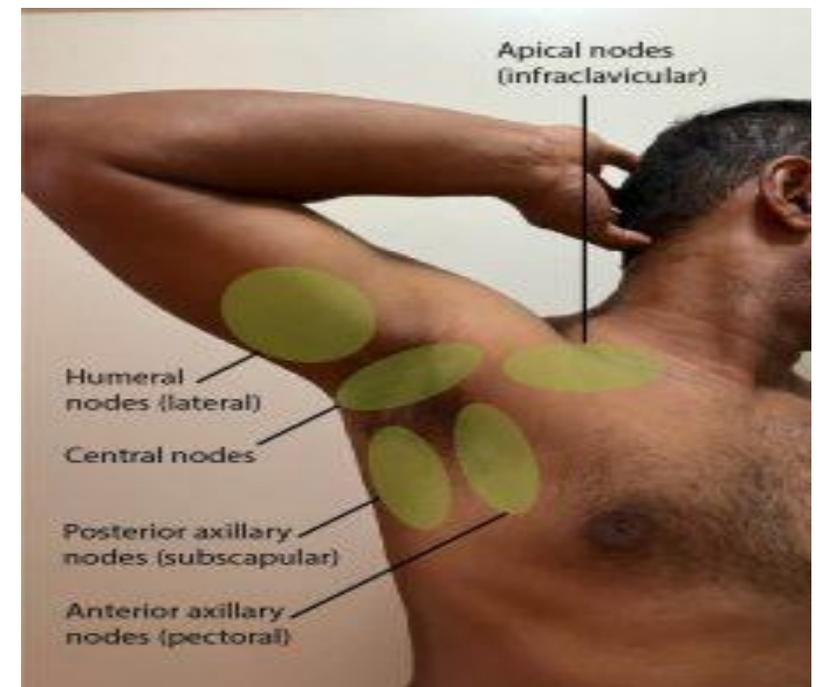
**Stand on the patient's right side.**

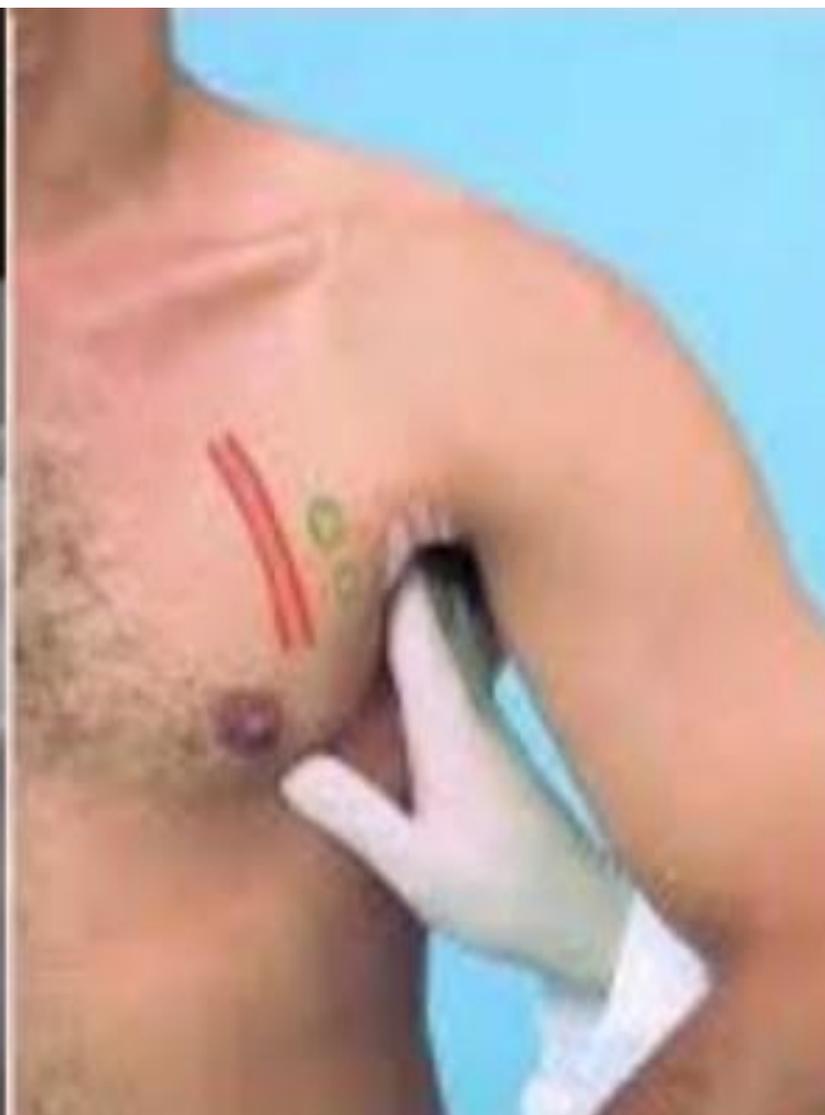
*Take hold of her right elbow with your right hand and let her forearm rest on your right forearm. Persuade her to allow you to take the weight of her arm. Place your left hand flat against the chest wall and **sweep the tips of your fingers** from the top of the axilla and from side-to-side to feel the nodes against the chest wall.*

*To reach the apex of the axilla, you will have to push the tips of your fingers upwards and inwards.*

*Next, move your left hand anteriorly over the anterior axillary fold and downwards into the axillary tail and behind the edge of the pectoralis major muscle.*

Lastly, palpate for infra- and supra- clavicular lymphadenopathy





# # Breast Examination Checklist :

<b>INSPECTION</b> (From foot of bed & patient right side)	
	Exposed from the waist up and lie at 45° on the couch
	General inspection for JACCOL + Cachexia
	Asymmetry of size, shape, skin changes (redness, retraction, puckering, Peau d'orange), nodule, ulcer, dilated veins
	Nipple & areola (crack, fissure, eczema) (level, retraction, asymmetry, discharge)
	Auchincloss's method (slowly raise both arms over head) & then Hands behind head <ul style="list-style-type: none"> <li>• Assess fixation of mass, puckering more evident.</li> <li>• Under the breast.</li> <li>• Axilla (swelling LN., veins, muscle wasting)</li> </ul>
	Hand on hips & press in (tense pectorals & accentuates asymmetry & tethering)
	Forward lean (accentuates abnormality in large pendulous breast)
	Inspect abdomen (TRAM flap)
	Inspect the back (for latissimus dorsi reconstruction)
	Surgical sequelae after mastectomy like scapula winging
<b>PALPATION</b> beginning with unaffected side (redress other breast)	
	tenderness
	Temperature
	Hand behind head & tilt to contralateral side (breast will lie flat on the chest)
	Palpate 7 areas (4 quadrants, axillary tail, nipple areolar complex, inframammary fold) The areola & nipple between 2 finger (consistency)
	Nipple discharge (squeeze each quadrant toward nipple)
	Examine the breast with lump <ul style="list-style-type: none"> <li>• Lump description (site; each quadrant, shape, size; cm, surface; smooth or irregular, edge; well-defined &amp; consistency; soft, firm, hard)</li> <li>• Fluctuation.</li> <li>• Transillumination (dark room, torch)</li> </ul>
	Assess fixation of lump: <ul style="list-style-type: none"> <li>• Skin (puckering by inspection attach to skin, bet 2 finger tethering above lump; not attach to skin)</li> <li>• To breast tissue (2 fingers &amp; 2 hands).</li> <li>• To muscles [patient hands on hip] move the lump with pectoralis muscle direction and then in right angle [with &amp; without tension]. If immobile with relax muscles [hands on hips without pushing] it's fixed to the chest wall (when you move the lump, whole chest move).</li> <li>• Push the wall (serrates anterior) palpate breast and inspect for winged scapula (long thoracic N.)</li> </ul>
	Feel <b>axilla</b> of both sides [non palpated hand support elbow at shoulder level] Lateral, medial, anterior, posterior & apex
	<b>Supraclavicular fossa</b> (both sides)
	Complete: <ul style="list-style-type: none"> <li>• <b>chest</b> [Percussion &amp; auscultation to (effusion, consolidation)].</li> <li>• <b>Abdomen</b> palpation for hepatomegaly.</li> <li>• <b>Axil spine</b> Percussion for tenderness.</li> </ul>
<b>THANKING</b> the patient.	



***Thank you***