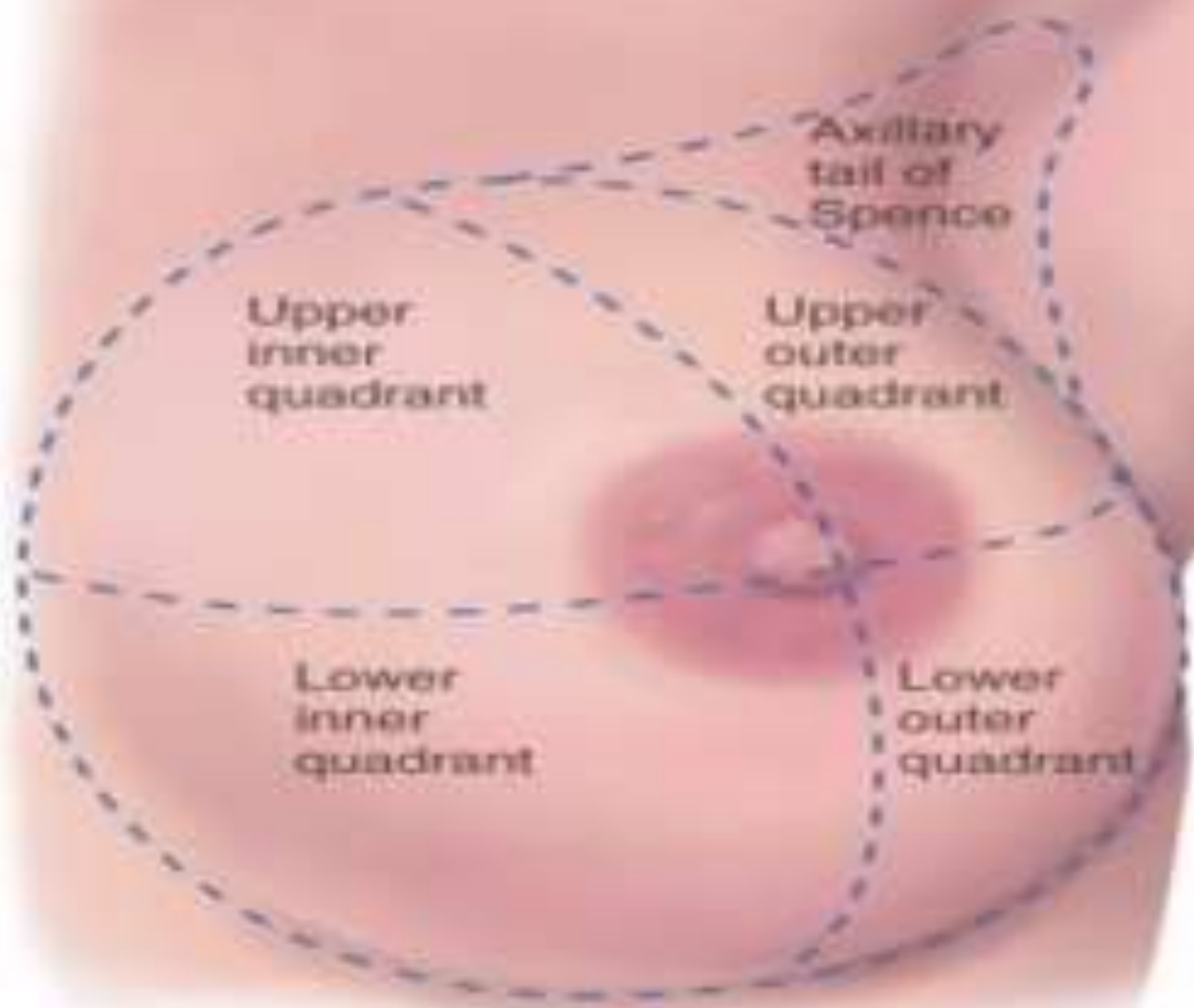


## Breast Examination

- The physical examination of the breast can be divided into three components: inspection, palpation and lymph node ex
- In performing the breast examination is important to keep in mind the following general points:
  - It is better not to wear gloves while palpating the breasts. Wearing gloves may reduce your ability to fully appreciate all the features of a lesion, especially the smallest ones
  - Remember to always wash your hands before and after performing the breast examination
  - It is advisable for male examiners to have a female chaperone assist during the examination
  - The worst moment to perform a breast examination is right before the beginning of the menstruation when the most common benign lesions are more painful and bigger, making it difficult to differentiate between them and a malignant mass
  - The best moment to perform a breast examination is right after the end of the menstruation, when benign lesions are smaller and less tender
  - It is important to educate the patients to distinguish between normal and abnormal findings on self-examination of the breast



# Inspection

## Breast Exam

During the inspection of the breasts observe for any asymmetric findings, especially:

- Abnormalities in the overall shape of the breasts
- Changes in skin color
- Skin dimpling / retractions
- Spontaneous nipple discharge



Lump



Skin dimpling



Change in skin color or texture



Change in how the nipple looks, like pulling in of the nipple.



Clear or bloody fluid that leaks out of the nipple

## Patient Positioning

First inspect the breasts while the patient is sitting upright. Ask the patient to relax both upper extremities by gently placing her hands on the thighs.



## Inspection Maneuvers

There are some maneuvers that can be used to tense the skin covering the breasts, making it easier to detect abnormalities, especially the presence of dimpling or retractions of the skin.

In the first maneuver, ask the patient to move both arms above the head and then hold this position for a few seconds while continuing the inspection.



In the second maneuver, have the patient firmly pressing both hands against the hips. Again, continue to observe any abnormalities in the breasts that may become more evident with this maneuver.



## Common Presentations: Mastitis vs Breast Abscess

Breast redness, tenderness and warmth, especially in a lactating woman with fever, may be signs of mastitis, a fairly common presentation.

It is important to differentiate mastitis from a breast abscess. Both conditions are usually seen in the postpartum period in lactating women and both represent an infection that develops behind a clogged mammary gland duct.

It may be very difficult to differentiate between a simple mastitis and an abscess by exam alone. In this case, bedside ultrasound could be very useful to localize a purulent collection and make a diagnosis of a breast abscess.

Breast warmth and redness are also associated with inflammatory breast carcinoma. In this case, however, the patient does not usually have a fever and the skin may have a classic appearance of peau d'orange (orange peel skin).



# Palpation

## Breast Exam

Before starting the palpation of the breasts, it is important to ask the woman to indicate the exact location of any masses felt during self-examination.

When palpating the breasts, it is important to pay attention to the following features of any identified masses:

- o **Shape:** the most common benign lesions, like a cyst or a fibroadenoma, have very *regular* borders while cancerous nodules tend almost always to be *irregular* in shape
- o **Consistency:** a mass that feels *rock hard* or otherwise *very firm* is probably malignant, while a rubbery or elastic consistency is typical of a benign lesion
- o **Relation to the skin:** a lesion that is very *fixed to skin* is usually malignant
- o **Changes over time:** *rapid changes* of a lesion over weeks to months raise suspicion for cancer
- o **Tenderness:** cancerous nodules tend to be *nontender*, while benign lesions are often particularly *tender*. A mass that changes in tenderness during the menstrual cycle is most likely benign



## Patient Positioning

Palpation of the breasts starts with the patient sitting upright on the examination table. This position is exactly the same as the one used during inspection. Both hands lie relaxed on the patient's lap.



Then ask the patient to lie supine on the examination table with both hands behind the head and repeat the palpation on both sides. This position allows the examiner to press any lesions against the chest wall making it easier to detect abnormalities that may have gone unnoticed in the upright position. For the same reason, it also facilitates the exam of the nipple area for both nodules and discharges.



## Palpation Technique

It is important to keep in mind the following points about the correct palpation technique:

- Palpation is best done by using the finger pads rather than the fingertips
- One hand palpates the breast for any abnormalities while the other sustains and stabilizes the breast
- It is important to thoroughly and systematically palpate all the areas of the breast, including the tail of spence in the upper outer quadrant
- There are different ways to move across the breast. Some clinicians prefer to move in circles starting from the nipple and going towards the periphery. Others prefer to move following imaginary lines that divide the breast in wedges, always from the nipple outwards. However, the most effective strategy based on available evidence is the “lawnmower” method where the hand moves up and down, from one side to the other, describing vertical lines all across the breast
- Remember to press the nipple against the chest wall to elicit any discharges if not spontaneously present
- If tenderness is present on one side, always start the exam on the nontender side



Circles



Wedges



Lines



# Lymph Node Examination

## Breast Exam

It is important to conclude the breast exam with a thorough examination of the axillary lymph nodes to check for any metastatic lesions, when breast cancer is suspected.

### Correct Technique

With the patient sitting upright on the examination table support the arm on the examined side and ask the patient to fully relax the arm. In this way the skin of the axillary region will be completely relaxed making it easier to appreciate any enlarged lymph nodes. Also, the arm is held in slight abduction at an angle of approximately  $45^{\circ}$  degrees.

At this point palpate the axilla with your free hand using the tips of your 2<sup>nd</sup>, 3<sup>rd</sup> and 4<sup>th</sup> fingers.

Remember to check the supraclavicular and infraclavicular lymph nodes, too, which may be sites of spreading for breast cancer, even if less commonly than the axillary nodes.

