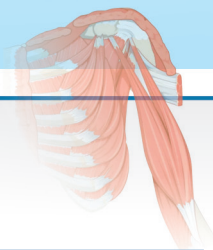


# Upper Limb

**Case 1**

A 44 years old woman visited the surgeon with complaint of hard, painless lump in upper outer quadrant of left breast, which she had noticed while taking bath. On inspection, surgeon found left nipple was slightly higher than the right nipple. Retraction of nipple was seen. Two small dimples were seen on outer and upper quadrant of left breast. On palpation he found left breast was immobile and axillary lymph nodes were enlarged on left side.

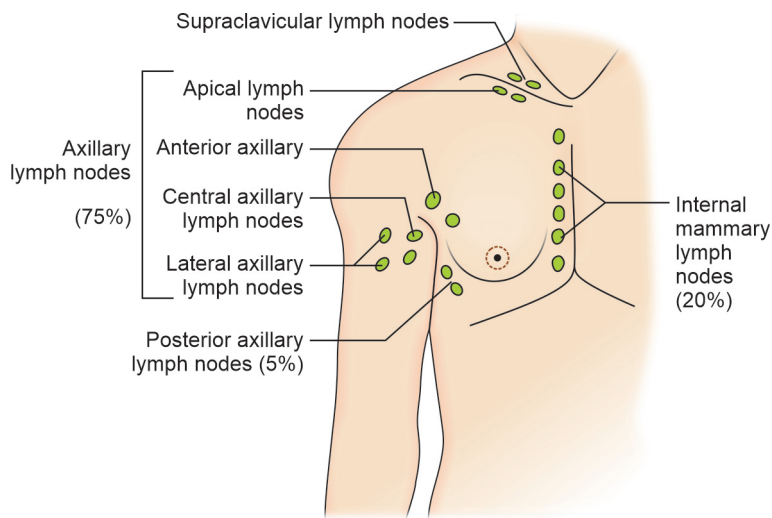
**Questions**

- What is the probable diagnosis?
- Why the axillary lymph nodes are enlarged in this case?
- Why left nipple was slightly higher than right nipple?
- Why dimples were present on left breast?
- Why the left breast was immobile?
- Why left nipple was retracted?
- Which incision is preferred in case of breast abscess?

**Answers**

- Breast carcinoma
- Spread of cancer cells from the primary lesion is primarily through lymphatics. Cancer cells also spread through local infiltration and blood. Axillary group of lymph nodes usually involved in early stage of malignancy. About 75% of lymph from the breast drains into axillary group of lymph nodes, 20% drains into parasternal and 5% lymph drains into

posterior intercostals lymph nodes. That is why axillary lymph nodes are enlarged in this case.



**Fig. 1.1:** Lymphatic drainage of breast

- c. In breast parenchyma, the contracting fibrous tissue had pulled the lactiferous ducts. These ducts converge towards nipple. So, pulling of lactiferous duct leads to elevation of nipple on affected side.
- d. Fibrosis of ligament of Cooper resulting in dimpling of breast.
- e. Fibrosis of ligament of Cooper is responsible for fixation of the breast to the underlying deep fascia which is pectoral fascia. This leads to immobility of breast.
- f. Retraction of nipple occurs because cancer cells invade the lactiferous ducts.
- g. Radial incision is preferred in case of breast abscess to avoid cutting across lactiferous ducts.