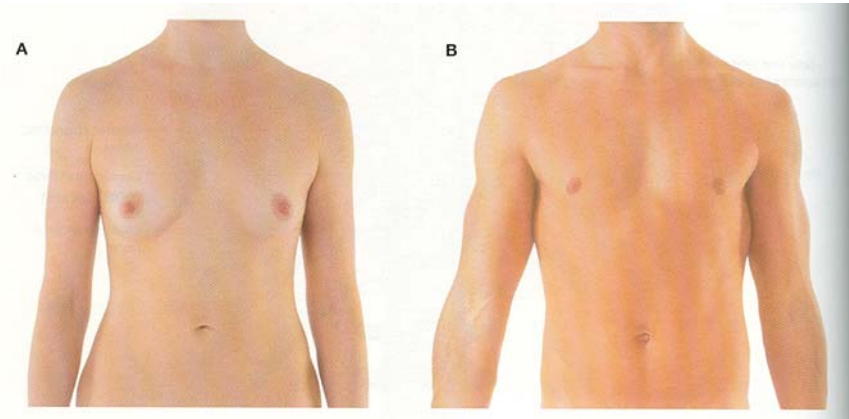


# BREAST/ MAMMARY GLAND

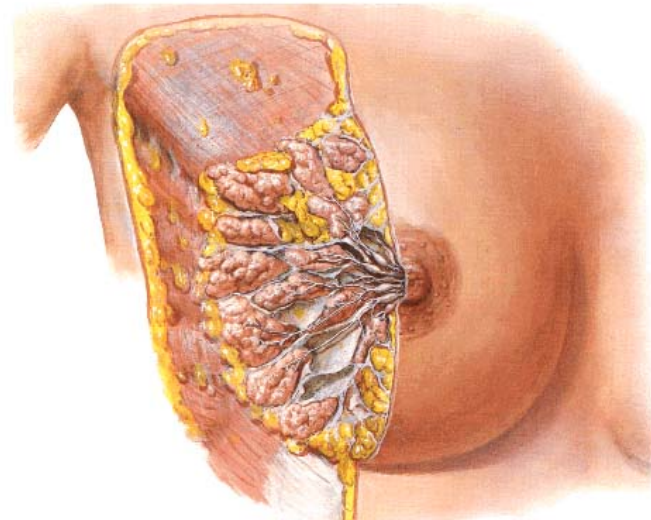
Modified sweat gland

Accessory organ of reproductive system & well developed after puberty in female

Provides milk to the newborn



Mammary Gland  
Anterolateral Dissection



## SITUATION

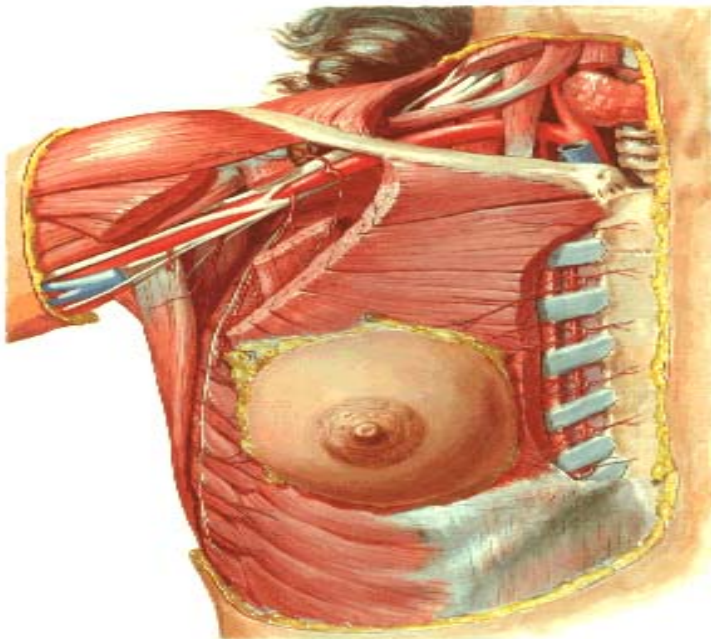
Superficial

Axillary tail ( of spence ) in  
Axilla

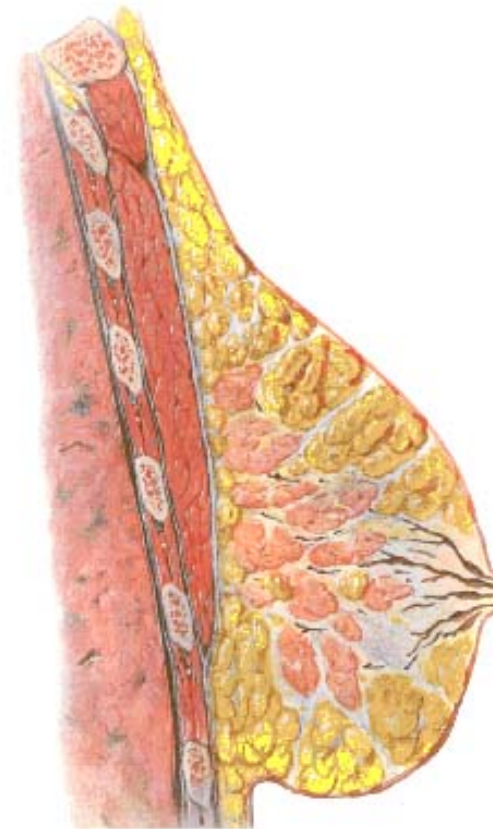
# EXTENT

- Vertical : 2 nd -6th rib
- Horizontal :-lat. Bor.of sternum –Mid axillary line

**Arteries of Mammary Gland**



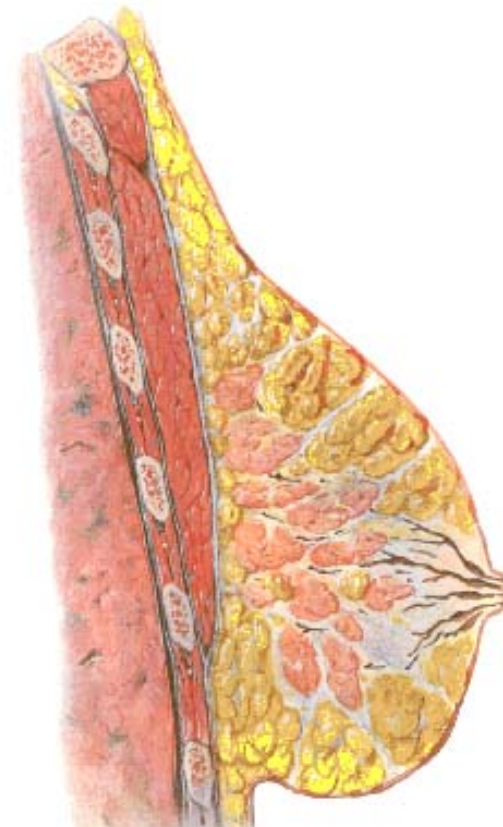
**Mammary Gland**  
Sagittal Section



# DEEP RELATIONS

Mammary Gland  
Sagittal Section

- Retromammary space
- Pectoral fascia
- Pectoralis major, Serratus anterior, External oblique abdominis
- Clavipectoral fascia, Pectoralis minor
- 2<sup>nd</sup> – 6<sup>th</sup> rib & 2<sup>nd</sup> – 5<sup>th</sup> intercostal space with its contents





# STRUCTURE OF BREAST

- **SKIN**

Nipple & Areola (no hair & fat)

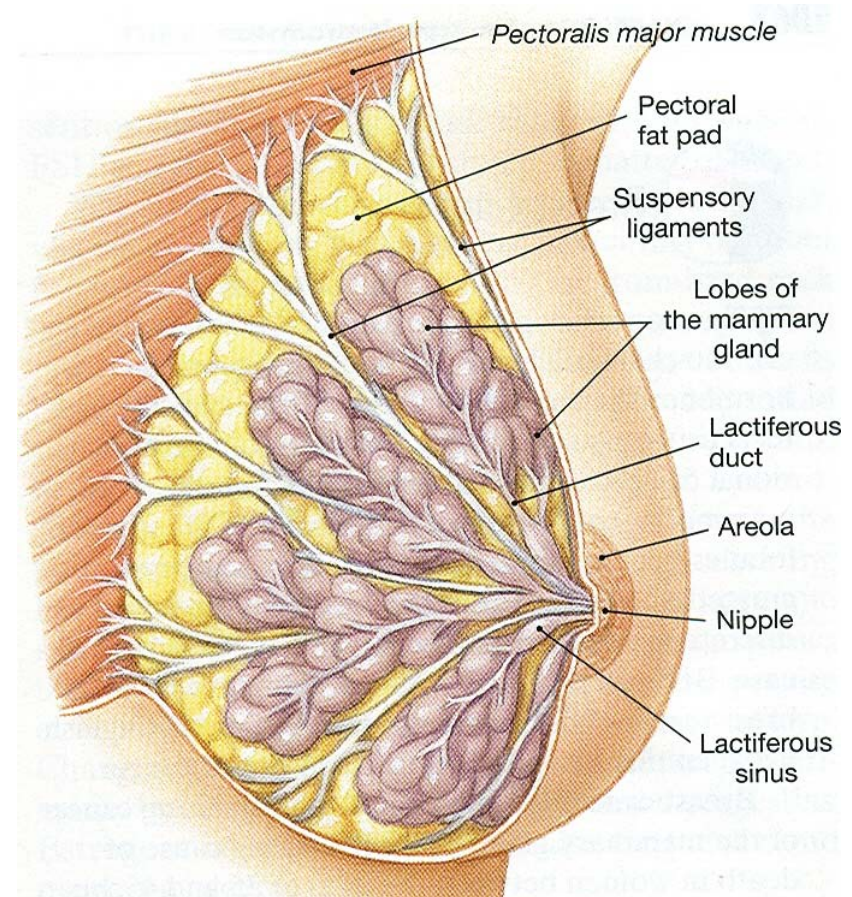
- **PARENCHYMA(15-20 lobes)**

lactiferous duct- l.sinus  
–alveolus

- **STROMA**

Fibrous(suspensory ligament)

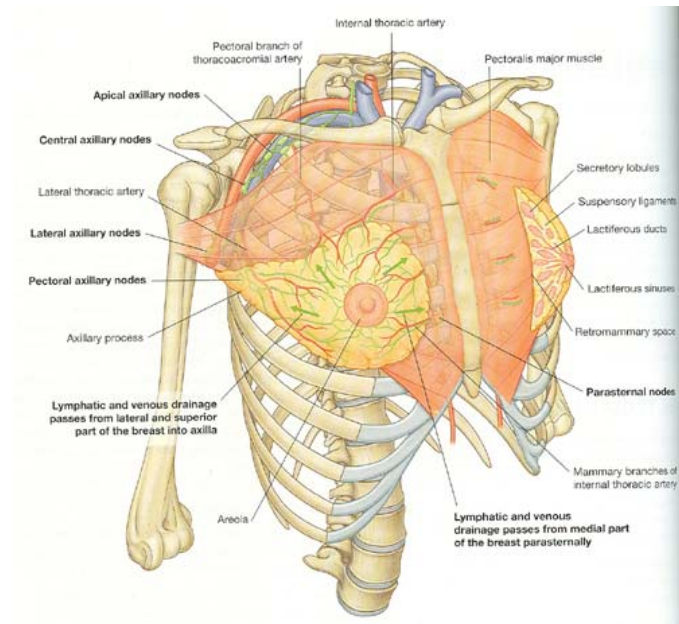
Fat



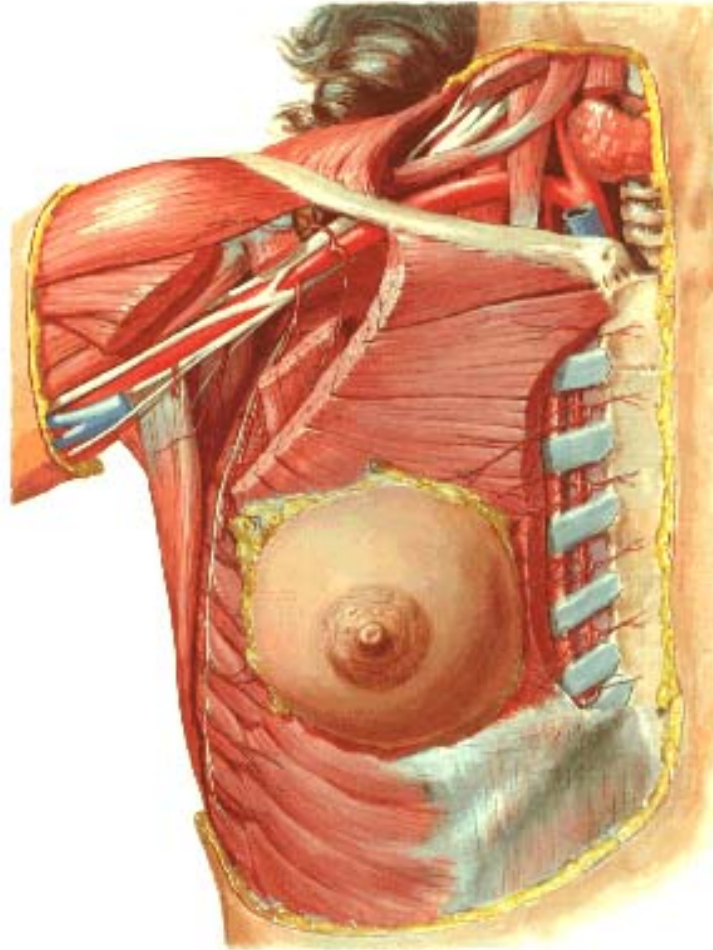
# BLOOD SUPPLY

**Arterial:supply from ant.  
Surface (post. Avascular)**

- Perf. Branches of int. thoracic art.
- Branches of lat. Thoracic, superior thoracic, acromio thoracic(thoraco acromial)
- Lat. Branches of post.intercostal art.



## Arteries of Mammary Gland



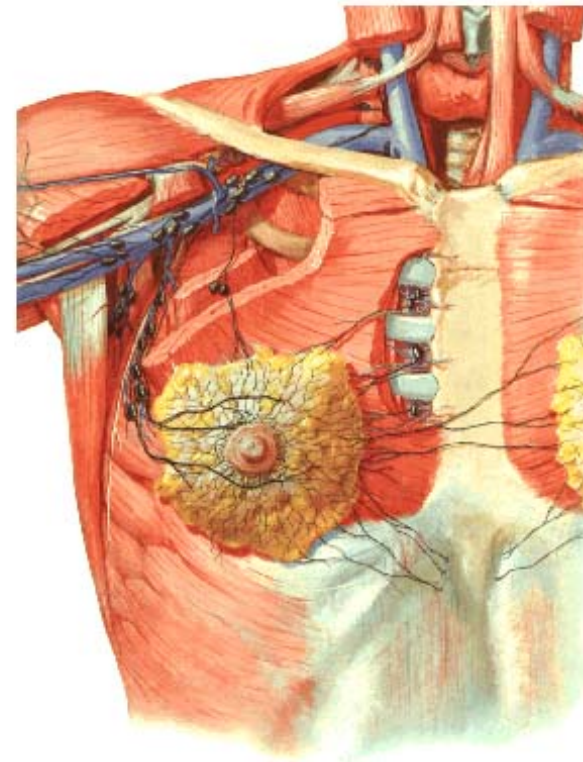
# VENOUS DRAINAGE

- Follows the arteries
- Converge towards the base of the nipple & forms an anastomotic v. circle
- Venous circle        S/F
- I.TH., LOW. PART OF NECK
- DEEP-  
I.TH., AXILLARY, P. INTERCOSTAL

# LYMPHATIC VESSELS

- S/F –SKIN EXCEPT NIPPLE & AREOLA
- DEEP- PARENCHYMA + NIPPLE & AREOLA

Lymph Vessels and Nodes of Mammary Gland

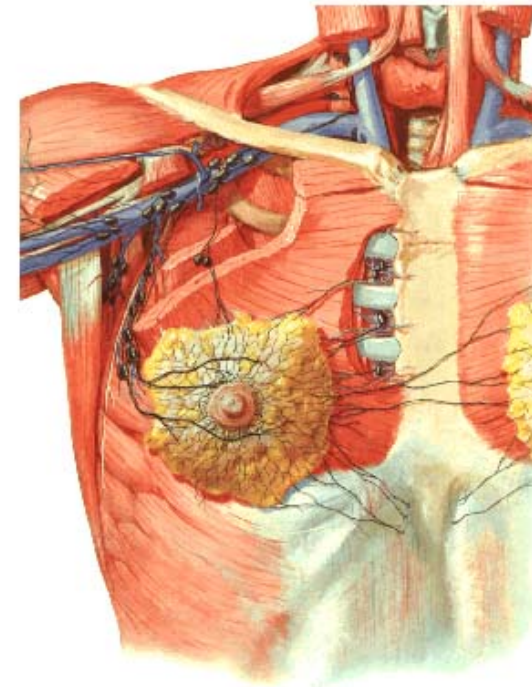




# LYMPH NODES

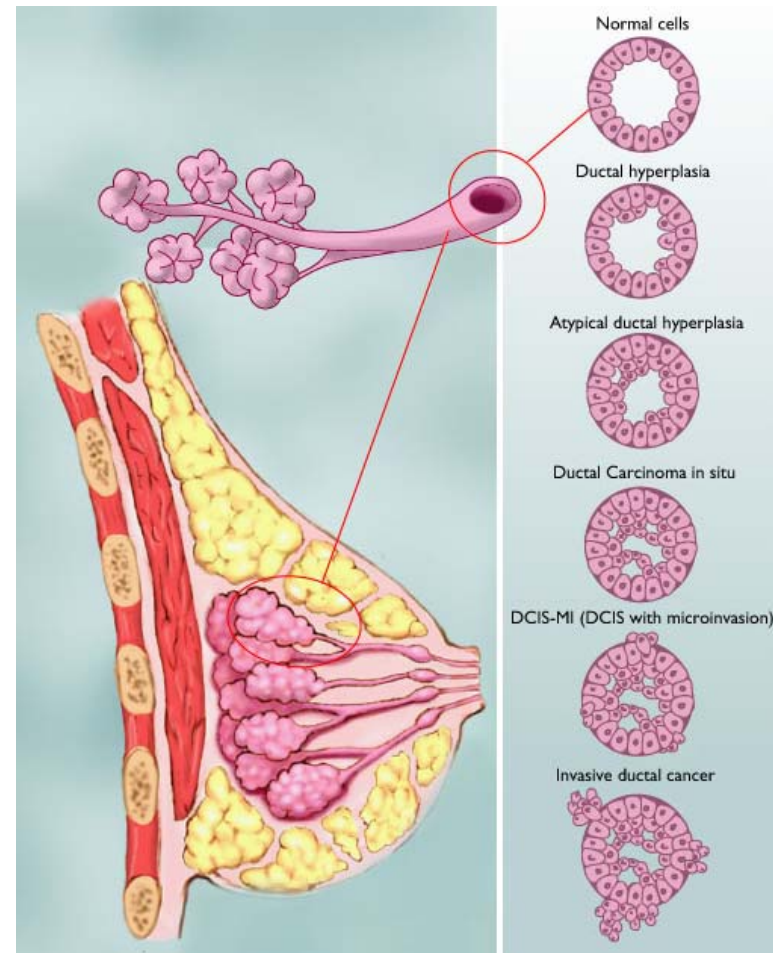
- AXILLARY L. N. - ANT. (CHIFLY)  
(75%)
  - POST.
  - LAT.
  - CENTRAL
  - APICAL
- PARASTERNAL (INTERNAL MAMMARY) L.N.  
( 20%)
- SUPRACLVICULAR, DELTOPECTORAL, POST. INTERCOSTAL, SUBDIAPHRAGMATIC, SUBPERITONEAL (5%)

**Lymph Vessels and Nodes of Mammary Gland**



# APPLIED ANATOMY (CARCINOMA & ABSCESSES)

- INCISIONS- RADIALLY (avoid cutting lactiferous ducts )
- BREAST FIXED –(cancer cells infiltrate the suspensory ligaments )
- RETRACTION OR PUCKERING OF THE SKIN – (contraction of ligaments due to cancer cells )
- RETACTION OF NIPPLE – infiltration of lactiferous ducts & consequent fibrosis



# APPLIED ANATOMY (CARCINOMA & ABSCESSES)

- PEAUD' ORANGE APPEARANCE –obstruction of s/f lymph vessels
- METASTASIS TO OTHER BREAST –s/f lymphatics communicate across the midline
- METASTASIS TO LIVER & PELVIS-communication with abdomen
- METASTASIS TO VERTEBRAE & BRAIN –veins communicate with the vertebral venous plexus of veins )

