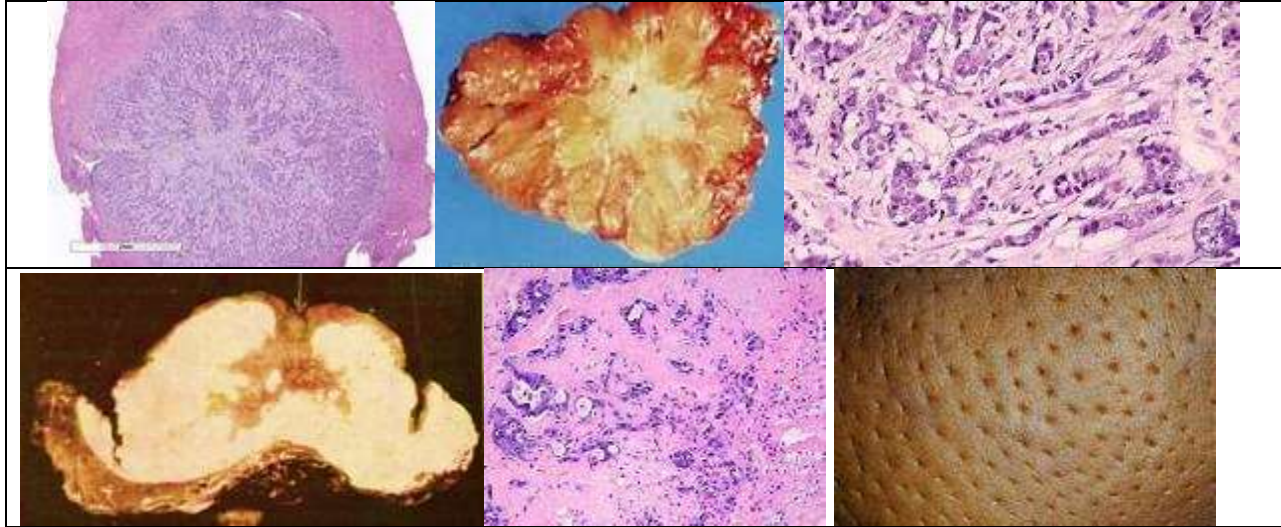


## XXII. Diseases of the Breast

- Clinically, the patient may, by chance, notice a **painless freely-movable lump which is somewhat limited and which may be mistaken for a cyst or nodular mass** (inflammatory or neoplastic).
- **Pathological examination can establish the correct diagnosis at an early time** (biopsy; needle -aspiration; freezing method).
- Carcinoma of the breast usually occurs at (or after) menopause.
- Lesions in the upper outer quadrant of the breast have a somewhat better prognosis than those in the central region or in the inner quadrants.
- Carcinoma arising **in the older age groups tends to be more slowly-growing than pre-menopausal women.**

**Carcinoma (scirrhus)**

<b>Breast:</b>	<ul style="list-style-type: none"> <li>• Is that of an adult female</li> <li>• Slightly enlarged</li> </ul>
	<b>Cut surface:</b> <ul style="list-style-type: none"> <li>• Is shrunken</li> <li>• Flattened</li> <li>• Shows a tumour</li> </ul>
	<b>Overlying skin:</b> <ul style="list-style-type: none"> <li>• Depressed</li> <li>• Thickened</li> <li>• Wrinkled</li> <li>• Corrugated (cancer en cuirasse)</li> <li>• Some areas (except at hair-follicles) are oedematous (<i>peau d'orange appearance</i>)</li> </ul>
	<b>Nipple:</b> <ul style="list-style-type: none"> <li>• Is retracted</li> <li>• Infiltrated at its base</li> </ul>
	<b>The tumour:</b> <ul style="list-style-type: none"> <li>• Lies at upper outer deep part of the breast</li> <li>• Is relatively-small in size</li> <li>• Rounded or slightly ovoid (in general)</li> <li>• Shows ill-defined margins</li> <li>• Has infiltrated the breast-tissue (malignancy)</li> <li>• With radiating processes of whitish fibrous tissue strands</li> <li>• In parts is greyish with: <ul style="list-style-type: none"> <li>• White streaks (fibrous tissue):</li> <li>• Yellowish-chalky area (necrosis)</li> </ul> </li> </ul>
	<b>Consistence:</b> <ul style="list-style-type: none"> <li>• Very firm-to-hard</li> </ul>
	<b>Lymph nodes (regional):</b> <ul style="list-style-type: none"> <li>• Enlarged Infiltrated by the same type of tumour-tissue</li> </ul>



**N.B.:**

While cutting through the tumour-tissue, a gritty sensation was felt like an unripe pear), and the cut surface appeared concave.

**The spread of carcinoma of the breast:**

**I. Local:**

1. Infiltration: Early but slow infiltration of the tissue-spaces between the fat and the fibrous tissue.
2. Extension along the lymphatics.

**II. At a distance:**

**1. Lymphatics:**

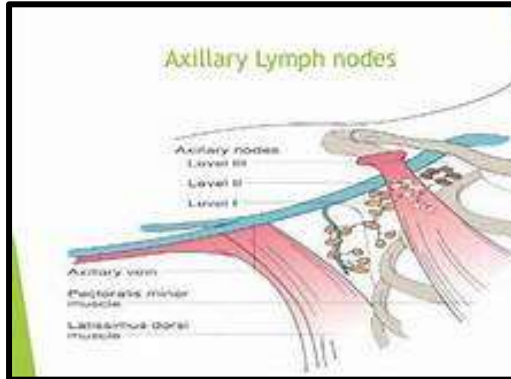
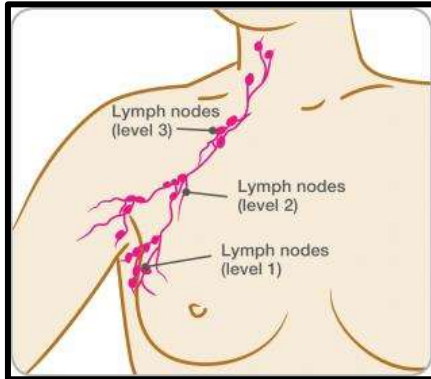
- (a) Embolism.
- (b) Permeation.

**The obliteration of deep lymphatics →**

1. Oedema of skin. (in cancer of breast)
2. Dimples.
3. Skin of orange "peau d'orange".
4. Cancer en cuirasse.
5. Elephantiasis-like (if a large lymphatic vessel is obstructed).



STAGE	TUMOR SIZE	LYMPH NODE STATUS	METASTASIS
Stage 1	T1 <3 cm	N0	M0
Stage 2	T2 3-5 cm	N0	M0
Stage 3	T3 >5 cm	N0	M0
Stage 4	Any	N1 (positive)	M0
Stage 5	Any	Any	M1 (metastasis)



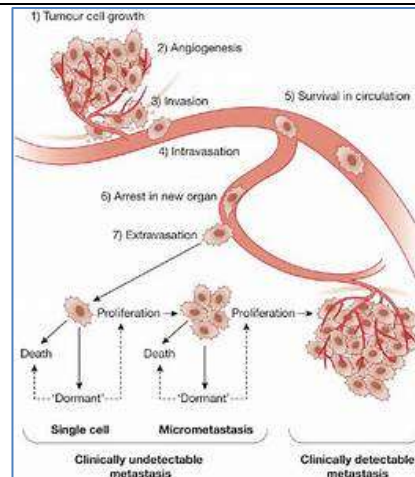
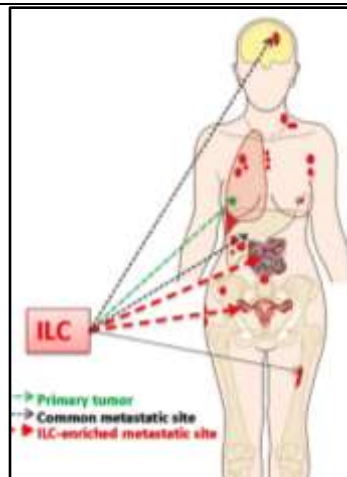
**1. Lymphatic spread:**

- **Medially** → to the opposite breast (cross lymphatic connection).
- **Laterally** → to axilla.
- **Superiorly** → to clavicle and neck.
- **Inferiorly** → to abdominal lymph nodes and visceral lymph nodes.
- **Deeply** → to chest lymph nodes (internal mammary artery)

**2. Blood :**

To:

- Lungs.
- Liver.
- Bones.
- Brain
- Adrenal glands.
- Spleen.
- Ovaries.
- Pituitary gland.



**3. Transcoelomic** implantation into serous cavities.