

CARCINOMA BREAST:

site - upper outer quadrant.

- most common malignant tumor.

CLASSIFICATION:

1. Epithelial tumor
 - Benign - Adenoma, Atypical ductal hyperplasia, lobules
 - In situ carcinoma - Ductal carcinoma in situ, lobular carcinoma in situ
 - Invasive carcinoma - Medullary, Tubular, Mucinous, Papillary, Lobular carcinoma
2. Mesenchymal tumor / Fibroepithelial tumors
 - Fibroadenoma
 - Phyllodes tumor
 - Lipoma

- Tumor of the Nipple - Paget disease, Nipple Adenoma
- Lymphomas of Breast
- Metastatic tumor to the Breast → Metastasis from melanoma, lung

RISK FACTORS:

- Prolonged exposure to estrogen
- Family history
- Endogenous → Early menarche, Late menopause, Nulliparity
- Exogenous → Hormonal Replacement therapy, Obesity
- Environmental factors → Radiation, Toxins, cigarette, High fat diet, Alcohol, ?
- Geography - Absence of breast feeding, Reproductive pattern

2) Cribriform DCIS → sieve-like pattern, space b/w the intraductal tumor. They space are round, evenly distributed Regular in shape

3) Micropapillary DCIS → show bulbous protrusions without a fibrovascular core

4) Papillary DCIS → papillae with fibrovascular cores

5) Solid DCIS → completely fills the involved space

Lobular Carcinoma In Situ (LCIS)

Arise in terminal duct lobular units

The proliferating cell fill the lobules

→ Lack of E-cadherin or mutation of E-cadherin gene (CDH1)

MORPHOLOGY

Tends to be bilateral

Macro → individual Acini are enlarged and distended

Tumor cell → Monotonous cell → loose, noncohesive, uniform population of cells.

→ Mucin +ve signet ring cell.

IHC → express ER And PR

INVASIVE CARCINOMA: (IBC)

heterogeneous group of malignant epithelial neoplasm of the glandular elements

classified into → Invasive BC of no special type (NST)

↳ spread histological types.

NST: large And heterogeneous group of TBLs that cannot be classified morphologically as histological type

MORPHOLOGY: - unifocal
site - upper outer quadrant

GROSS:

Hard And irregular - firm to hard in consistency.
irregular outline

cut section → nodular or stellate on cut section

Appear tan - white to gray firm to hard

grating sound

Nipple Retraction

MICRO

tumor cell are arranged in cords, sheet, nests, solids, trabeculae And glands.

Tumor cell:

→ Abundant And eosinophilic cytoplasm.

→ Nuclei may be Regular / uniform

Stroma → desmoplastic stroma to scanty element of connective tissue.

Nottingham Histologic Score

Scored depending on → tubule formation

→ nuclei pleomorphism

→ mitotic Rate

Both

- Grade 1 (well diff carcinoma) → prominent tubules
- Grade 2 (moderately ") → solid or single epithelial cell.
- Grade 3 (poor " ") → enlarged irregular nuclei

Special morphologic pattern

- medullary
- invasive. C with neuroendocrine diff
- carcinoma with osteoclast like stromal giant cell.