SECTION 9

PRECANCEROUS LESIONS
DYSPLASIA
CARCINOMA IN SITU
PRECANCEROUS LESIONS (1)

Some non-neoplastic lesions with later development of neoplasia.
PRECANCEROUS LESIONS

- Villous adenomas of the colon
- Chronic atrophic gastritis
- Chronic ulcerative colitis
- Hepatic cirrhosis
- Chronic skin fistula
- Leukoplakia of the oral cavity, vulva, or penis
DYSPLASIA

A non-neoplastic proliferation in the epithelia

- A loss in the uniformity of the individual cells
- A loss in their architectural orientation
CARCINOMA IN SITU

Dysplastic changes involve the entire thickness of the epithelium, but not yet invaded through the epithelial basement membrane.
Intraepithelial Neoplasia (IN)

- **IN I** —— mild dysplasia
- **IN II** —— moderate dysplasia
- **IN III** —— severe dysplasia, carcinoma in situ
SECTION 10

BRIEF INTRODUCTION OF COMMON TUMORS
Epithelial tumors
Mesenchymal tumors
Others
CHAPTER 5

- Epithelial tumors
- Mesenchymal tumors
- Others
Benign

- Papilloma
- Adenoma

Malignant

- Squamous cell carcinoma
- Adenocarcinoma
- Basal cell carcinoma
- Transitional cell carcinoma
• Papilloma
• Adenoma

1. Polypous adenoma
2. Cystadenoma
3. Fibroadenoma
4. Pleomorphic adenoma
Polypous adenoma of the colon
Serous papillary cystadenoma of the ovary
Mucinous cystadenoma of the ovary
Fibroadenoma of the breast
Fibroadenoma of the breast
Pleomorphic adenoma of the parotid gland
Carcinoma

- Origin: epithelia
- >40 years old
- Growth by Infiltration
- Metastasis: Lymphatic route (favored)
Morphology

NE stony-hard
whitish
course

LM tumor cell masses
clear borderline between parenchyma and stroma
- Squamous cell carcinoma
- Basal cell carcinoma
- Transitional cell carcinoma
- Adenocarcinoma
  - Tubular adenocarcinoma
  - Solid carcinoma
  - Mucoid carcinoma
Well-differentiated squamous cell carcinoma with intercellular bridges and nests of keratin pearls
Mucinous carcinoma
Signet-ring cell carcinoma
Epithelial tumors

Mesenchymal tumors

Others
Benign

- Fibroma
- Lipoma
- Hemangioma
  & Lymphangioma
- Leiomyoma
- Osteoma
- Chondroma

Malignant
Malignant

- Fibrosarcoma
- Liposarcoma
- Hemangiosarcoma
- Kaposi sarcoma
- Rhabdomyosarcoma
- Leiomyosarcoma
- Osteosarcoma
- Chondrosarcoma
Lipoma
Comparison of carcinoma and sarcoma

Table 6-7  p137
玉hythmelial tumors

Mesenchymal tumors

Others
Retinoblastoma. A, Gross photograph of retinoblastoma. B, Tumor cells appear viable when in proximity to blood vessels, but necrosis is seen as the distance from the vessel increases. Dystrophic calcification (dark arrow) is present in the zones of tumor necrosis. Flexner-Wintersteiner rosettes-arrangements of a single layer of tumor cells around an apparent "lumen"-are seen throughout the tumor, and one such rosette is indicated by the white arrow.
Malignant melanoma
Teratoma

- Origin: germ cells
  - Ectoderm
  - Endoderm
  - Mesoderm

- Mature (benign, dermoid cyst)
  & immature (malignant)
TUMORS OF HEMATOPOIETIC & LYMPHOID SYSTEMS

- Leukemia
- Lymphoid Neoplasms
  - Hodgkin Lymphoma
  - Non-Hodgkin Lymphoma

p303
A, Acute lymphoblastic leukemia/lymphoma. Lymphoblasts with condensed nuclear chromatin, small nucleoli, and scant agranular cytoplasm. B and C represent the phenotype of the ALL shown in A, analyzed by flow cytometry. B, Note that the lymphoblasts represented by the red dots express TdT and the B-cell marker CD22. C, The same cells are positive for two other markers, CD10 and CD19, commonly expressed on pre-B lymphoblasts. Thus, this is a pre-B cell ALL.
Hodgkin lymphoma, nodular sclerosis type
Follicular lymphoma (lymph node). A, Nodular aggregates of lymphoma cells are present throughout lymph node. B, At high magnification, small lymphoid cells with condensed chromatin and irregular or cleaved nuclear outlines (centrocytes) are mixed with a population of larger cells with nucleoli (centroblasts).
GESTATIONAL TROPHOBLASTIC TUMORS

p369
◆ Hydatidiform mole
◆ Invasive mole
◆ Choriocarcinoma
- Hydatidiform mole
- Invasive mole
- Choriocarcinoma
◆ Hydatidiform mole
◆ Invasive mole
◆ Choriocarcinoma
- Hydatidiform mole
- Invasive mole
- Choriocarcinoma