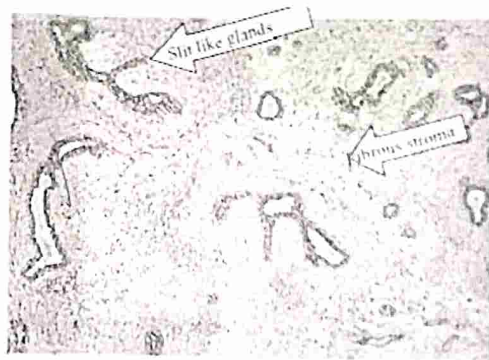
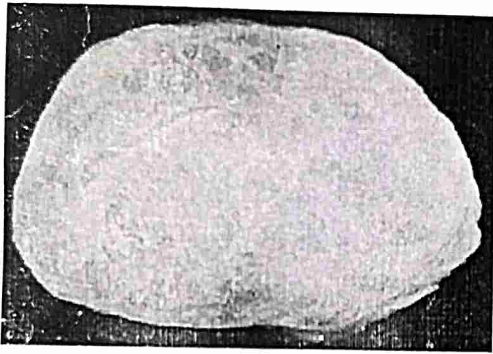


Ahmed Mustafa

F17-011.

SGD-1 MBBS



Gross: Well demarcated, capsulated, nodular tumour
Micro: Compressed slit like glands in cellular stroma.

Define Neoplasm:- an abnormal tissue, the growth of which exceed and incoordinated with that of a normal tissue & persists in the same excessively manner after the cessation of a stimuli which evoked the changes.

An 18yrs old female presents with solitary, discrete, movable mass in right breast which enlarges late in the menstrual cycle. On examination the lump is freely mobile and sharply circumscribed. FNAC is performed which shows slowly growing, well differentiated cells with rare mitosis and normal configuration.

✓ 1. What is the Diagnosis?

Key: Fibroadenoma

Fibroadenoma (fibrous tissue)
fibroblast of Benign tumor of fibroblast

2. Is this mass benign or malignant?

Key: Benign

3. What are two components of tumor? → Parenchyma. & stroma

Key: 1. Parenchyma 2. Stroma

4. Define hamartoma and choriostoma?

a. Hamartoma: disorganized mass of tissue whose cell types are indigenous to the site of the lesion disorganized mass of tissues whose cell types are indigenous to the site of the lesions.

b. Choriostoma: ectopic focus of normal tissue (heterotopia)

5. What are the differences b/w benign and malignant tumors?

Feature	Benign	Malignant
Rate of growth <i>Growing.</i>	Progressive but slow. Mitoses few and normal <i>Slow Growing.</i>	Variable. Mitoses more frequent and may be abnormal <i>fast growing.</i>
Differentiation	Well differentiated —	Some degree of anaplasia / <i>Poorly differentiated.</i>
Local invasion	Cohesive growth. Capsule & BM not breached	<u>Poorly cohesive and infiltrative.</u>
<i>Capsulated</i>	<i>Capsulated</i>	<i>Non-Capsulated.</i>
Metastasis	Absent <i>X</i>	May occur <i>✓</i>

aspirin
+ nitroglycerin

6. What is the difference between carcinoma and sarcoma?

Carcinoma :

Malignant tumor of epithelial origin

e.g. squamous cell carcinoma, adenocarcinoma, TCC, RCC

Sarcoma :

Malignant tumor of mesenchymal origin

e.g. (fibrosarcoma, osteosarcoma, liposarcoma)

fibrosarcoma
Osteosarcoma
liposarcoma

SGD-2



A 60 year old female presents with a firm lump in the right breast. On mammographic examination, areas of calcification are seen. Biopsy of the lump shows pleomorphic cells with hyper chromatic nuclei without invasion of the basement membrane

1. What is the most likely diagnosis?

Key: **Invasive carcinoma of breast**
(Invasive Ductal carcinoma of breast)

2. Is this swelling benign or malignant?

Key: **Malignant**

3. What are the four characteristics of tumors?

Key: **Differentiation, Rate of growth, local invasion, metastasis**

*Differentiation
rate of Growth
Local invasion
metastasis*

4. Name the benign and malignant germ cell tumors.

Benign : Teratoma Malignant: Teratocarcinoma

5. Name the benign and malignant tumors of mesenchymal origin. Probb (2019)

		<u>Benign</u>	Malignant ✓
A. Connective Tissue	Bone	Osteoma	Osteosarcoma
	Cartilage	Chondroma	Chondrosarcoma

Neoplasia

B. Hematopoietic
Fibroblast Fibroma Fibrosarcoma
Erythroid Erythroid leukemia

Myeloid
Lymphoid

Myelogenous leukemia
Lymphocytic leukemia
malignant lymphoma

Myelogenous leukemia
Lymphocytic leukemia

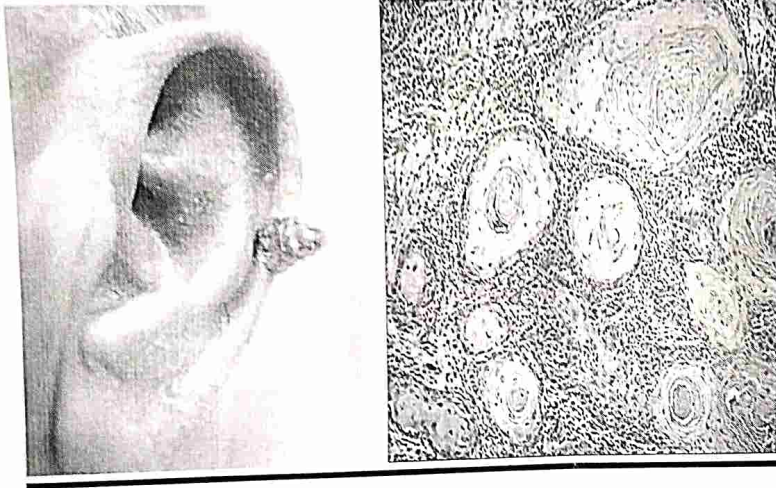
C. Muscle
Smooth muscle Leiomyoma Leiomyosarcoma
Leiomyoma
Striated (skeletal) muscle Rhabdomyoma Rhabdomyosarcoma
Rhabdomyoma

D. Vascular
(Hemangioma) Hemangioma Angiosarcoma

Hemangioma

Osteosarcoma
Hemangioma
Angiosarcoma

SGD-3



A 72-year-old man presents with a slowly growing, ulcerated lesion located on the pinna of his right ear. The lesion is excised, and histological sections reveal infiltrating groups of cells, with increased mitosis, hyperchromatic, poorly differentiated cells in the dermis. These cells have eosinophilic cytoplasm, intercellular bridges, and intracellular keratin formation.)

1. What is the most likely diagnosis?

Key: Well differentiated Squamous cell carcinoma

carcinoma

2. What is the importance differentiation?

Key:

Importance of differentiation

1. Site of origin in metastatic disease ✓

example: squamous carcinoma in a lymph node, sites of origin would include lungs, respiratory tract, gyn tract, skin

2. Prognosis ✓

well differentiated often better prognosis than poorly differentiated

3. Mode of Treatment ✓ *Mode of treatment*

treatment varies, example adenocarcinoma vs squamous

"adrenal gland"

3. Compare anaplasia, dysplasia, carcinoma in situ and desmoplasia.

• Anaplasia (lack of differentiation of tumors)

atypical
proliferation
of cells

✓ Dysplasia (Atypical proliferation of cells characterized by nuclear enlargement and failure of differentiation which falls short of malignancy)

Dysplasia may regress, persist or progress

• Carcinoma in situ: Full-thickness dysplasia extending from the basement membrane to the surface of the epithelium.

✓ Desmoplasia: The change that occurs in the stroma as tumor invades is called desmoplasia. Desmoplasia refers to the stroma composed of connective tissue and blood vessels that surrounds the infiltrating tumor.



4. Give four examples of benign and malignant tumors of epithelial origin?

Key: Any 4 examples of the following table;

ORIGIN

BENIGN

MALIGNANT

I. EPITHELIAL

Stratified squamous

Squamous cell papilloma

Squamous cell carcinoma

Basal cells of skin

Basal cell carcinoma

Epithelial lining from glands or ducts

Adenoma (e.g. of colon)

Adenocarcinoma (e.g. of colon)

Hepatocytes

Hepatocellular adenoma

Hepatocellular carcinoma (also called "hepatoma", a confusing Term)

hepatocellular adenoma. ←