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# Benign Tumor

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- **Objectives**
- **Define benign tumors.**
- **Identify the main characteristics of benign tumors.**
- **Classify benign tumors according to tissue origin with detailed examples.**
- **Recognize clinical features, diagnostic methods, and prognosis.**

- **Introduction**

- **Benign tumors are noncancerous growths of abnormal cells.**
- **They are localized, slow-growing, and non-invasive.**
- **Clinically important when compressing organs or causing symptoms.**

# General Characteristics

- **Growth Rate: Slow and progressive, localized.**
- **Differentiation: Cells resemble normal tissue, function often preserved.**
- **Encapsulation: Surrounded by fibrous capsule, clear borders.**
- **Spread: No invasion or metastasis, expansive growth pattern.**
- **Effects: Compression of nearby organs, obstruction of lumens, cosmetic or functional impact.**
- **Recurrence & Transformation: Rare recurrence after excision, malignant transformation uncommon but possible (colon, thyroid adenomas)**

# Full Classification of Benign Tumors

## A. Epithelial Benign Tumors

- **Adenoma:** Arises from glandular epithelium (thyroid adenoma, colonic adenoma).

thyroid adenoma



colonic adenoma (tubulovillous)



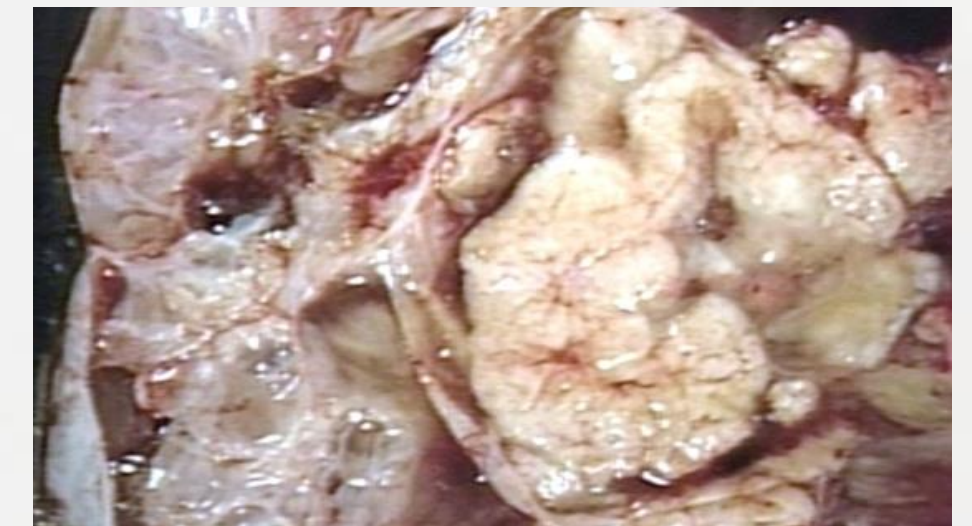
- **Papilloma:** Finger-like projections from epithelial surfaces (skin, bladder, larynx).

papilloma



- **Cystadenoma:** Cystic glandular tumor, common in ovary and pancreas.

ovrian cystadenoma



- **Basal cell papilloma (seborrheic keratosis):** Benign skin lesion, common in elderly.



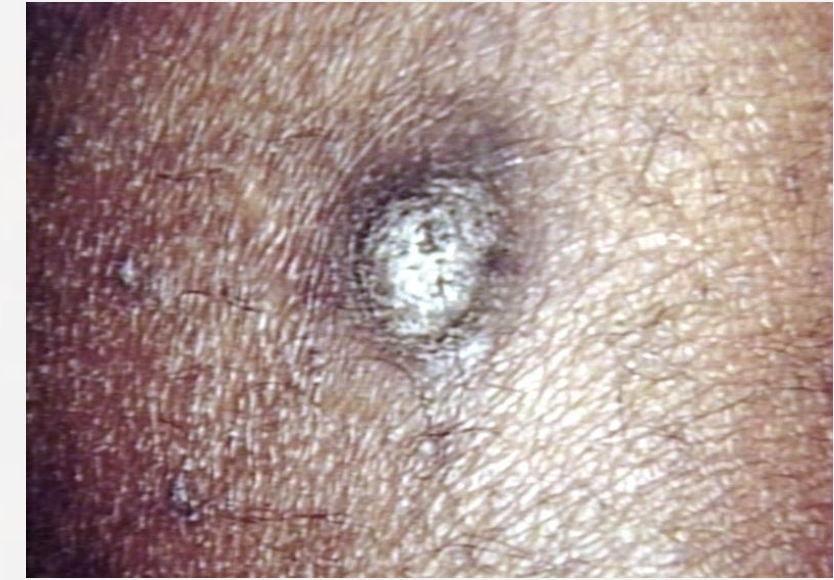
## B. Mesenchymal Benign Tumors

- **Fibroma:** Composed of fibrous connective tissue.
- **Lipoma:** Composed of mature fat cells; most common soft tissue tumor.
- **Chondroma:** Cartilage-forming tumor, usually in hands and feet
- **Osteoma:** Bone-forming tumor, often in skull or facial bones.
- **Leiomyoma:** Smooth muscle tumor, especially uterine fibroids.
- **Rhabdomyoma:** Rare benign tumor of skeletal muscle, sometimes in heart.

**Lipoma**



**skin Dermatofibroma**



**chondroma**



**Osteoma**



**Leiomyoma(uterus)**



**CARDIAC RHABDOMYOMAS**



## C. Vascular Benign Tumors

- **Hemangioma: Proliferation of blood vessels; common in infants, skin, and liver.**
- **Lymphangioma: Proliferation of lymphatic vessels; often congenital, seen in neck or axilla.**

## E. Germ Cell Benign Tumors

- **Mature teratoma: Contains tissues from multiple germ layers; ovarian dermoid cyst is classic**

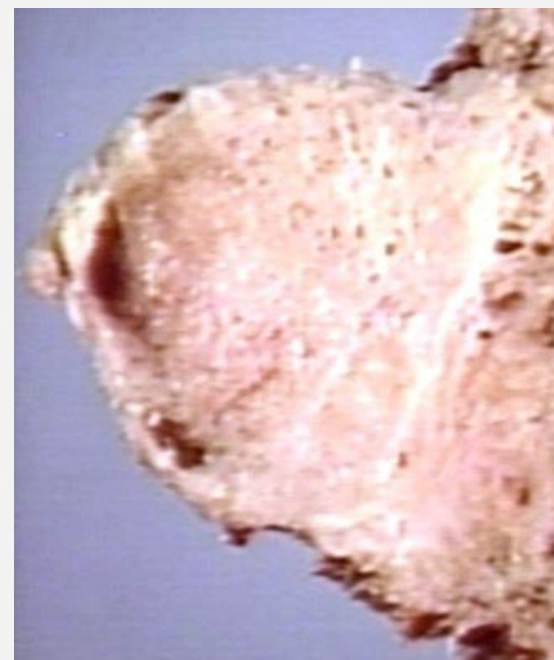
Hemangioma



Lymphangioma  
(neck)



Lymphangioma(axilla)



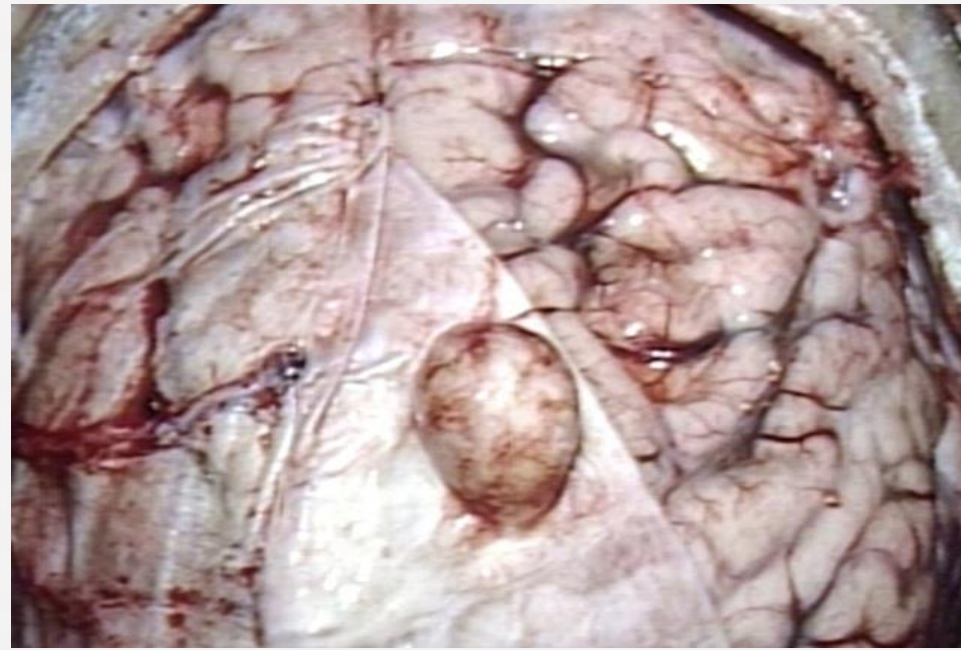
Dermoid cyst



# D. Neural Benign Tumors

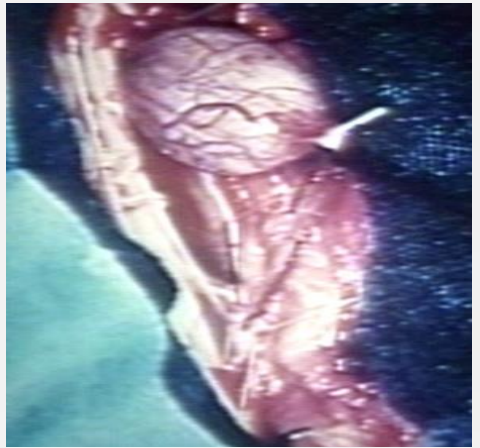
- **Meningioma:** Arises from meninges; common intracranial benign tumor.

Meningioma



- **Schwannoma (Neurilemmoma):** Arises from Schwann cells of peripheral nerves.

NERVOUS: SPINAL CORD: VON RECKLINGHAUSENS DISEASE, SCHWANNOMA



- **Neurofibroma:** Benign nerve sheath tumor, may be solitary or part of Neurofibromatosis type 1.

Neurofibroma



- **Ganglioneuroma:** Arises from ganglion cells, usually in adrenal medulla or sympathetic chain

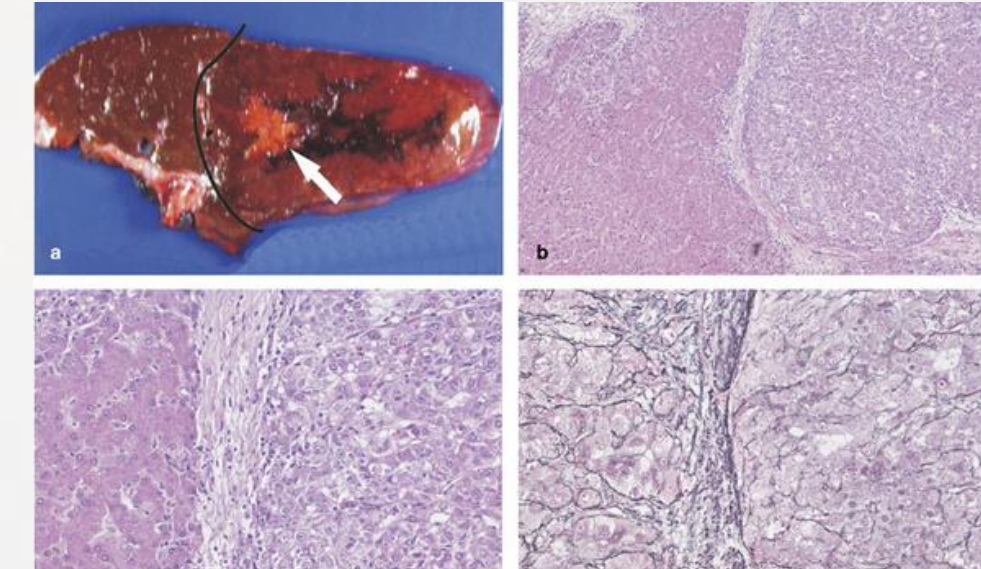
Ganglioneuroma



## F. Organ-Specific Benign Tumors

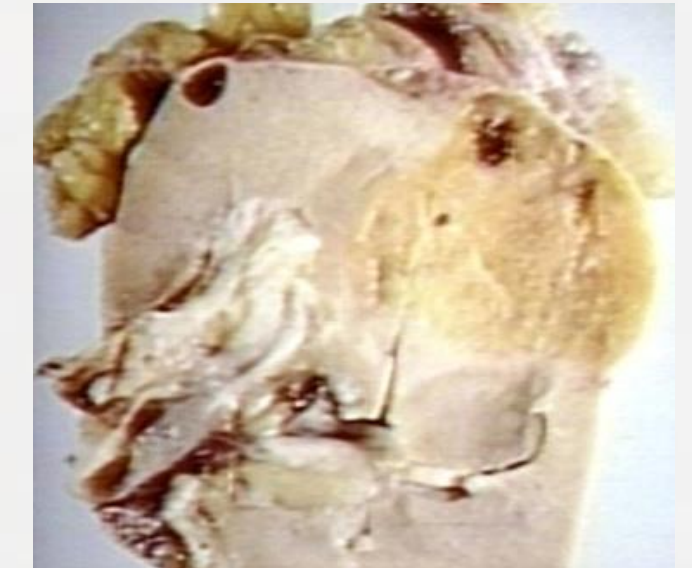
- **Hepatic adenoma:** Benign liver tumor, associated with oral contraceptive use.

Hepatic adenoma



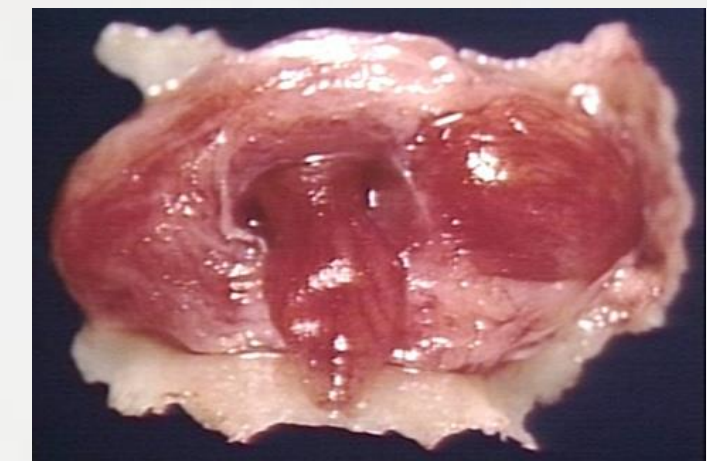
- **Renal oncocytoma:** Benign kidney tumor, may mimic carcinoma radiologically.

Renal oncocytoma



- **Pituitary adenoma:** Benign tumor of pituitary gland, can cause hormonal imbalance (e.g., prolactinoma).

Pituitary adenoma



- **Thyroid adenoma:** Benign thyroid nodule, may cause hyperthyroidism.

# **CLINICAL PRESENTATION & OUTCOME**

## **Clinical Features**

- **Often asymptomatic, discovered incidentally.**
- **Brain: headaches, seizures, neurological deficits.**
- **Uterus: heavy bleeding, infertility.**
- **Skin: cosmetic lumps.**
- **GI tract: obstruction, bleeding.**

## **Diagnosis**

- **Clinical examination.**
- **Imaging: Ultrasound, CT, MRI.**
- **Biopsy for histological confirmation.**

## **Prognosis**

- **Excellent overall.**
- **Rare malignant transformation (colon/thyroid adenomas).**
- **Monitoring required in critical sites (brain, endocrine glands**

## Sources

- [www.medlineplus.gov/benigntumors.html](http://www.medlineplus.gov/benigntumors.html)
- [www.my.clevelandclinic.org/health/diseases/21859-benign-tumors](http://www.my.clevelandclinic.org/health/diseases/21859-benign-tumors)
- [www.cancer.org/cancer/cancer-basics/what-is-a-tumor.html](http://www.cancer.org/cancer/cancer-basics/what-is-a-tumor.html)
- [www.tumourclassification.iarc.who.int](http://www.tumourclassification.iarc.who.int)
- [www.peir.path.uab.edu/library](http://www.peir.path.uab.edu/library)
- [www.webpathology.com](http://www.webpathology.com)

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THANK YOU