

VASCULAR TUMORS

Benign tumors

▪ Characteristics of benign tumor:

1. Contain vascular channels Lined by normal appearing endothelial cells
2. Most common
3. No metastasis

▪ Example:

Hemangioma

▪ Characteristics of Hemangioma:

1. Common
2. Composed of blood-filled vessels
3. Most common age? infancy & childhood
4. Most common location? head and neck
5. Many regress spontaneously (↓ size)
6. Some in internal organs (1/3 → liver)
7. Malignant transformation? very rare

▪ Histologic and clinical variants of Hemangioma:

Capillary hemangiomas	strawberry hemangiomas of newborn (juvenile hemangioma)	Pyogenic granulomas	Cavernous hemangiomas
most common type		1/3 history of trauma	large, dilated vascular channels
skin and mucous membranes of oral cavity & lips	head & neck	rapidly growing pedunculated lesions on gingival mucosa	deep organs (liver most common)
	Usually regress with time		do not spontaneously regress

Intermediate-Grade (Borderline) Tumors

- **Characteristics of borderline tumor:**

1. Intermediate between benign and malignant behavior
2. Rare
3. No metastasis
4. Locally aggressive

- **Example:**

Kaposi Sarcoma (KS)

- **Characteristics of Kaposi Sarcoma:**

1. Multiple red-purple skin plaques or nodules
2. Most common location? distal lower extremities
3. Caused by? human herpesvirus8 = HHV-8
4. Progressively increase in size and number and spread proximally
5. Types: classic/endemic/Transplantation-associated/AIDS-associated
6. AIDS-associated (epidemic) KS is an AIDS-defining illness (used as a criterion for diagnosis of AIDS)
7. The most common HIV-related malignancy

Malignant tumors

- **Characteristics of malignant tumor:.**

1. Rare
2. Metastasis
3. More cellular
4. Cytologic atypia
5. Proliferative
6. Do not form well-organized vessels

- **Example:**

Angiosarcoma

- **Characteristics of Angiosarcoma:**

1. Most common location: any site, but most often involve the skin, soft tissue, breast, and liver
2. Pathogenesis? Carcinogens
3. A latent period between exposure and tumor development

- **Risk factors of angiosarcoma:**

Chemical carcinogens (liver angiosarcoma) / Irradiation / Lymphedema / foreign bodies (long-term (years)).

CARDIAC TUMORS

- **Characteristics of cardiac tumors:**

1. Rare
2. Benign tumors are very rare
3. The most common malignancy of the heart? Metastatic Neoplasms
4. The most common source? lung cancer

- **The most common primary malignant tumor of the heart:**

Angiosarcomas

- **Clinical Features and significance of cardiac tumors:**

1. "Ball-valve" obstruction
2. Embolization
3. Fever and malaise → tumor elaboration of interleukin-6

- **Diagnosis:**

ECG

- **Treatment:**

Surgical resection in benign tumors

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