

# Solid Tumour Section

## Mini Review

### Bone: Vascular Tumours

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#### Identity

##### Note

Benign vascular lesions of bone are relatively common and occur most frequent as an asymptomatic incidental finding in the skull or spine. Primary malignant vascular tumors of bone are rare. They represent less than 1% of primary malignant bone tumors reported by the Netherlands Committee on Bone Tumors and 0,5% of those registered at the Mayo Clinic. Clinically they are extremely aggressive and have a very poor prognosis. Survival rates are unknown, but in those cases reported patients die very soon after diagnosis due to wide spread metastasis and lack of tailored therapy.

#### Classification

##### Note

Over the years, the terminology and classification of vascular tumors of bone has been highly controversial and in literature a great variety of names has been proposed. Today, angiosarcoma is the most acceptable term for high-grade malignant

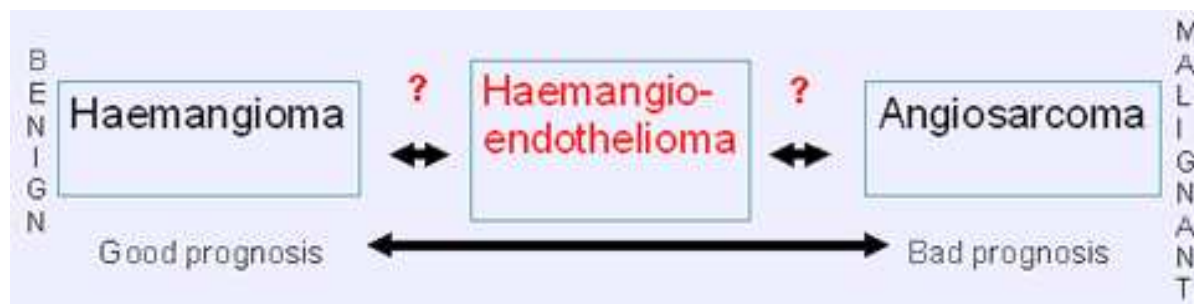
vascular tumors of bone, as recognized in the 2002 World Health Organization classification. However, the classification of low-grade vascular to inter-mediate tumors of bone, in particular of haemangio-endotheliomas, is extremely difficult due to the lack of uniform terminology and accepted histological criteria. Many authors have proposed different classification systems, but due to small numbers of cases, their large diversity and the lack of good correlation with clinical outcome none of them have been generally accepted so far. The large variety of histological features of vascular tumors of bone suggests that it should be regarded as a spectrum with on one side the overtly benign lesions and on the other side the frankly malignant lesions. In between there are the low and intermediate grade lesions in which numerous histomorphological diversity can be seen and for which classification is most difficult.

##### Classification

Today, the most accepted classification of vascular tumors of bone is the 2002 WHO classification:

Haemangioma and related lesions

Angiosarcoma.



Schematic representation of histological spectrum of vascular tumors of bone: accepted histological criteria to classify vascular tumors of bone are lacking.

## Clinics and pathology

### Disease

Haemangioma and related lesions

### Note

Multiple lesions are defined as (haem) angiomatosis

### Phenotype / cell stem origin

Endothelial cell.

### Epidemiology

Haemangiomas are relatively common.

### Clinics

In general asymptomatic.

### Cytogenetics

No cytogenetic investigations reported.

### Prognosis

Haemangiomas have a good prognosis and low recurrence rate.

### Disease

Angiosarcoma.

### Epidemiology

Extremely rare.

### Clinics

In general, presents as a painful mass. Depending on the size and localization of the tumour, neurological deficit or other symptoms can occur.

### Cytogenetics

No cytogenetic investigations of angiosarcoma in bone are reported.

### Prognosis

It is accepted that histologically well differentiated tumours have a better prognosis than poorly differentiated tumours.

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