#### diaphyseal leg; partial

21 yo ♂

1<sup>st</sup> referral: October 27<sup>th</sup>, 2015

#### **HPI:**

- First notice of a slightly increasing swelling at anterior shin 3 ½ yrs ago
- Pain upon exertion at left shin since summer 2014
- Pain causes sleeping disorders

#### PMH:

Bronchial asthma

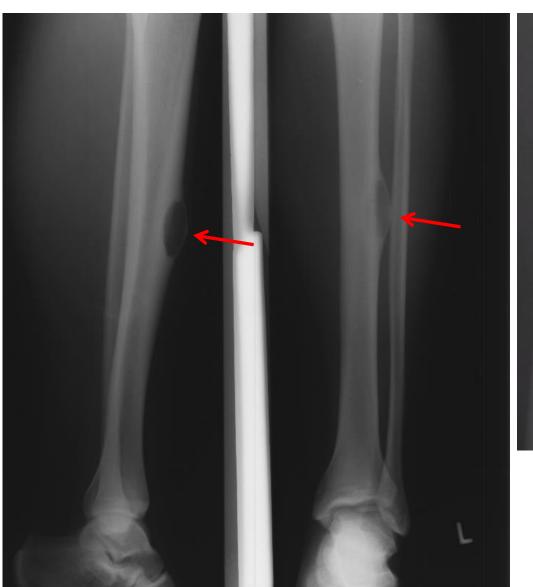


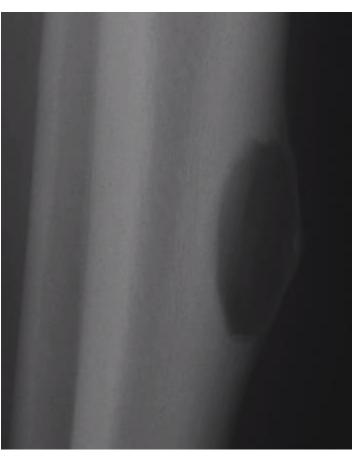
#### diaphyseal leg; partial Clinical findings on November 25<sup>th</sup>, 2015

- Bony prominence at anterior shin (3.5 x 3.5 cm)
- Painful upon palpation, hyperthermic
- No sensomotoric deficits



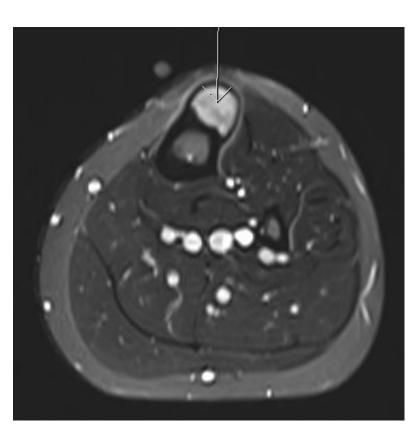
### diaphyseal leg; partial XR October 6<sup>th</sup>, 2015







# diaphyseal leg; partial MRI October 8th, 2015

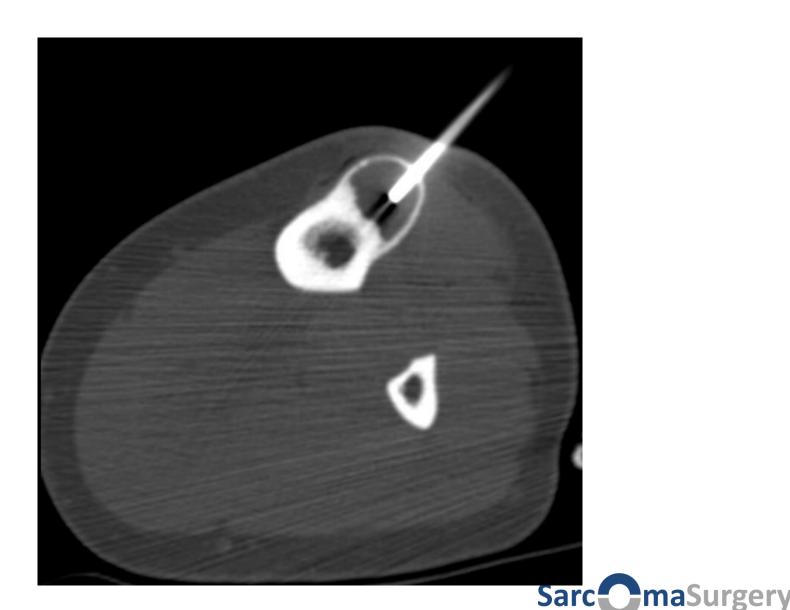


T1\_TIRM\_ax

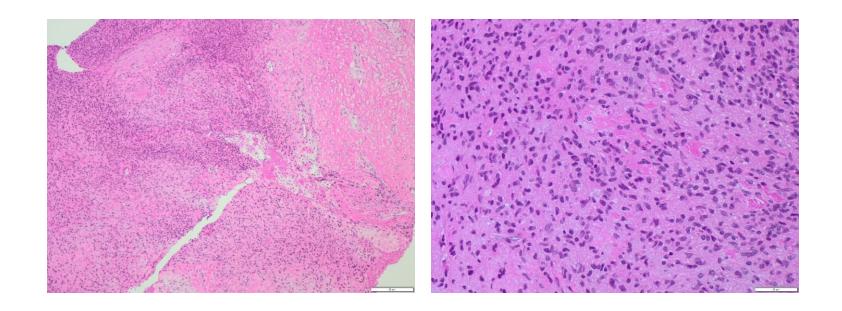


T1\_TSE\_cor Sarc maSurgery

## diaphyseal leg; partial CT-guided needle biopsy November 25<sup>th</sup>, 2015

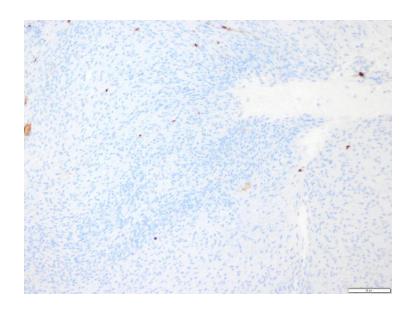


### diaphyseal leg; partial Histological Findings November 25<sup>th</sup>, 2015





#### diaphyseal leg; partial Histological Findings November 25<sup>th</sup>, 2015



CK - Neg

Keine osteofibröse Dysplasie Kein Adamantimom

Kein high grade Tumor

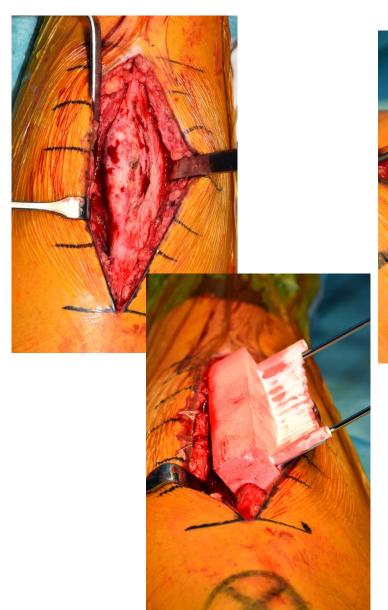
DD

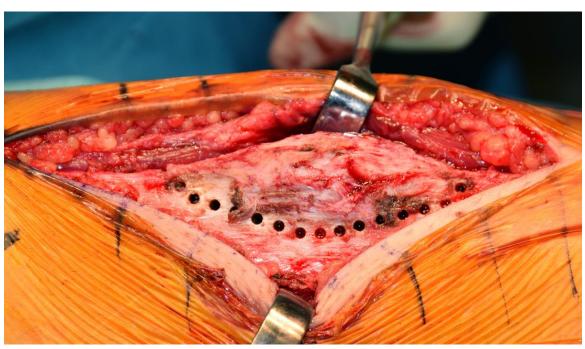
- -Chondromyxoid-Fibrom
- -Phosphaturischer mesenchymaler Tumor

**KONSIL** 

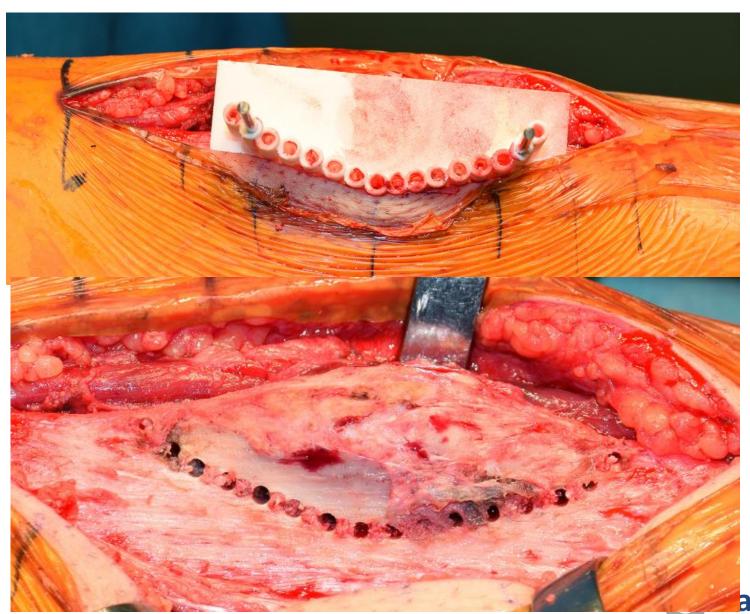
-DD low grade (intrakortikales??) OSA?





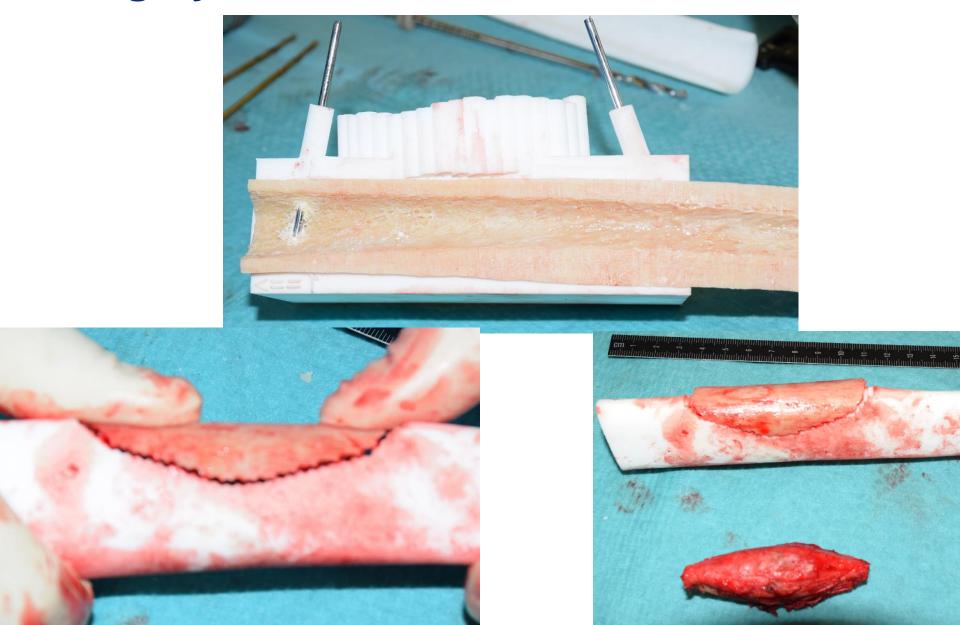


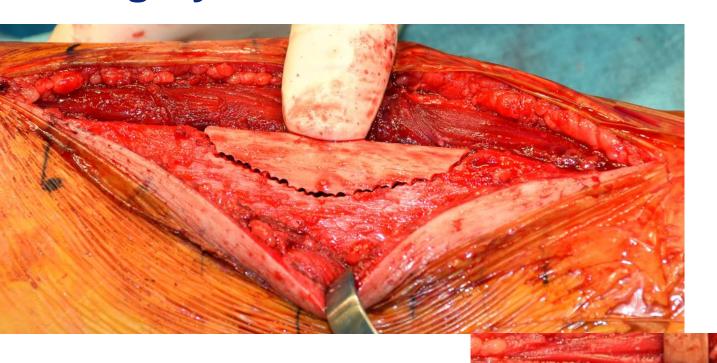


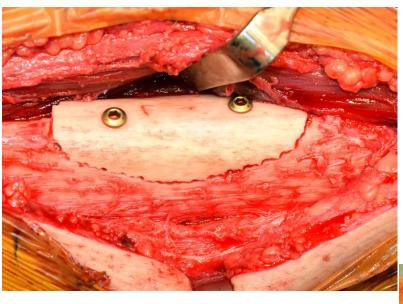


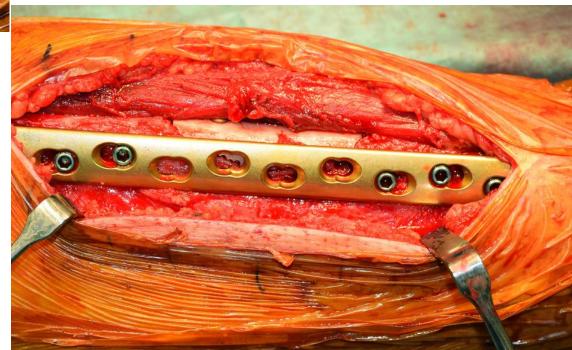
Surger











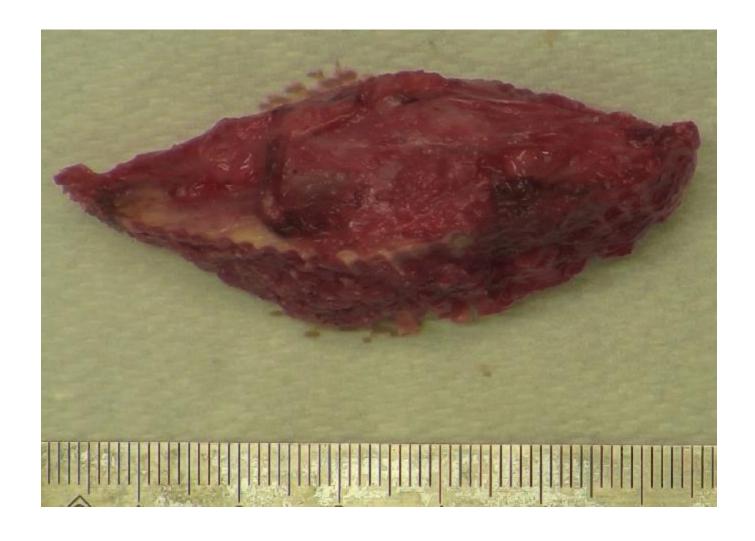
# diaphyseal leg; partial Postoperativ X-Rays 15.03.2016





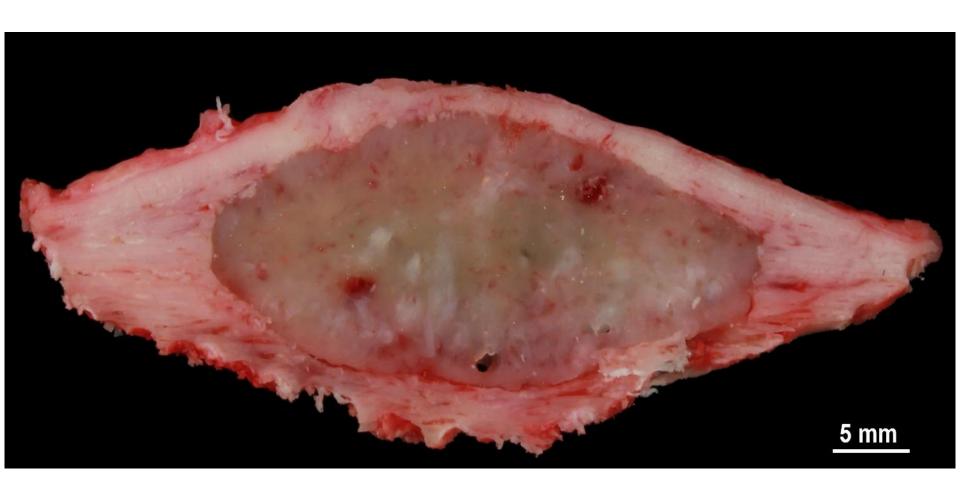
Sarc maSurgery

### diaphyseal leg; partial Histological Results March 15th 2016

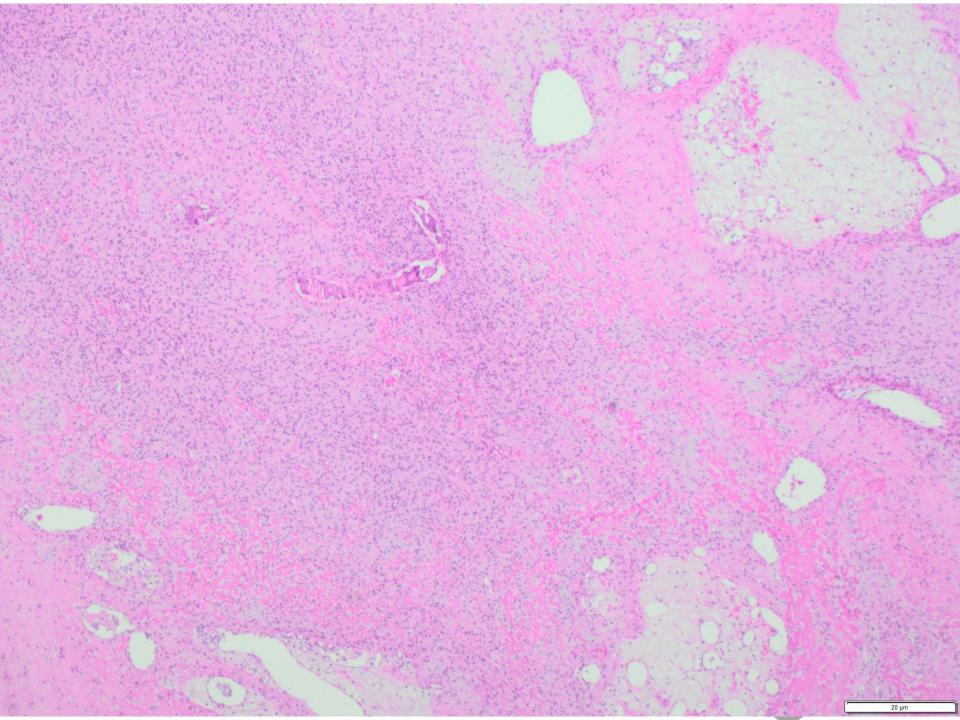


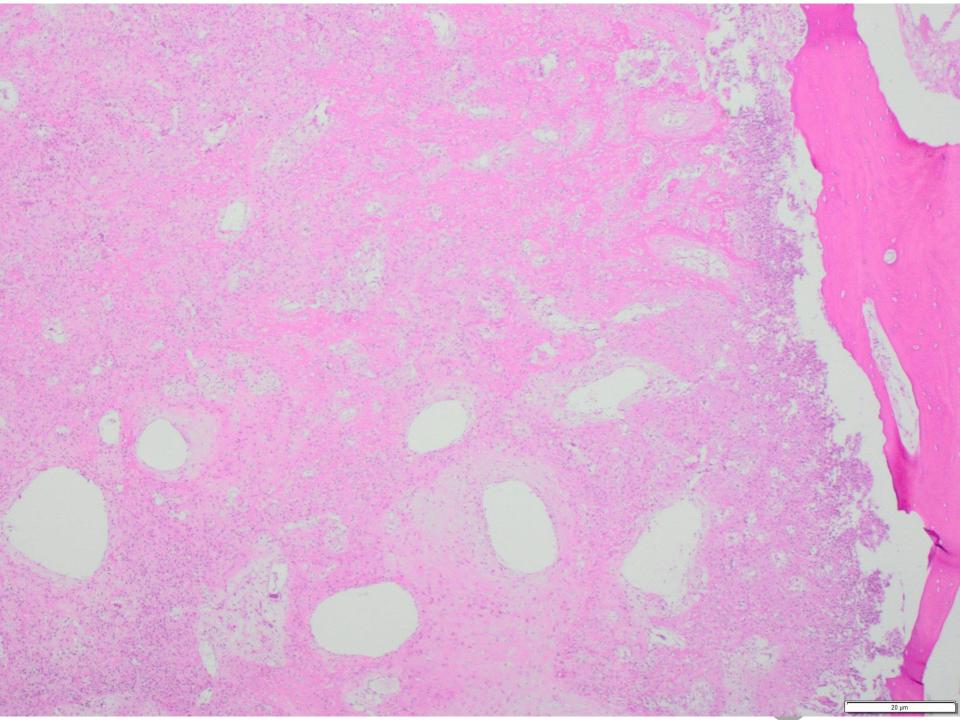


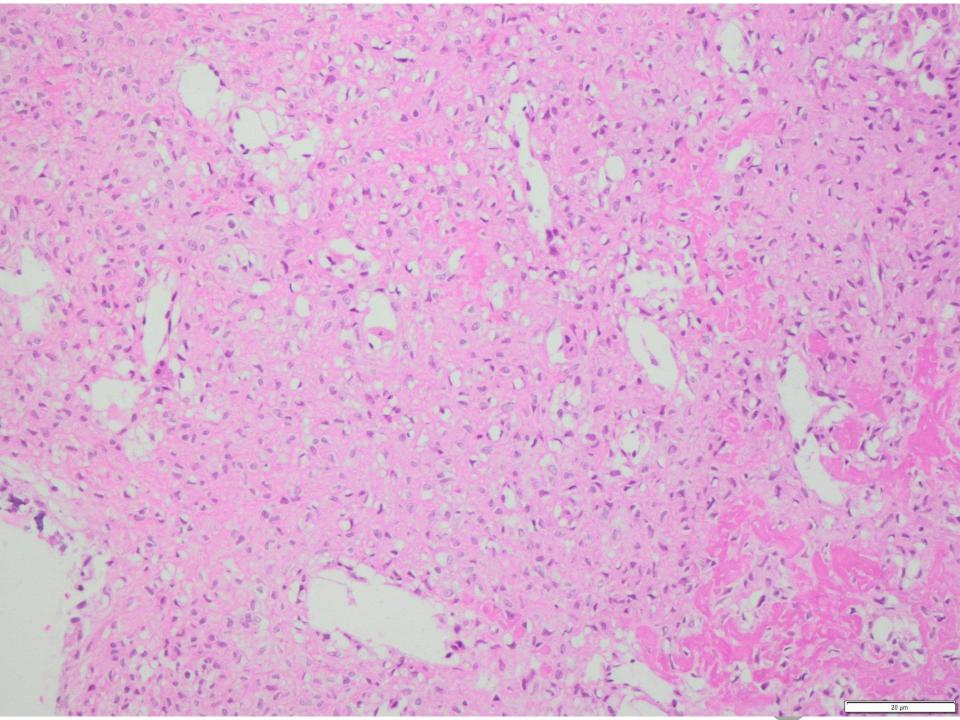
### diaphyseal leg; partial Histological Results March 15th 2016











#### Definition

Phosphaturic mesenchymal tumours are morphologically distinctive neoplasms that produce tumour-induced osteomalacia (TIO) in most affected patients, usually through production of fibroblast growth factor 23 (FGF23).

#### ICD-O code

Phosphaturic mesenchymal tumour 8990/0 Phosphaturic mesenchymal tumour, malignant 8990/3

#### Synonym

Phosphaturic mesenchymal tumour, mixed connective tissue type

#### **Epidemiology**

Phosphaturic mesenchymal tumours are

exceptionally rare, with fewer than 250 reported cases {140,245,595,884,1494,2919}. They occur most frequently in middleaged adults {140,884}, although they have been reported in infants {1352} and the elderly.

#### Sites of involvement

Phosphaturic mesenchymal tumours may involve essentially any soft-tissue location {140,245,884,2919}. They are extremely rare in the retroperitoneum, viscera and mediastinum {2506,2797}.

#### Clinical features

Most tumours present as small, inapparent lesions that may require careful clinical examination and radionuclide scans for localization {946,2555}. A long history

of osteomalacia is usually, but not always, present. Phosphaturic mesenchymal tumours appear to be responsible for the overwhelming majority of previously reported cases of mesenchymal tumour-associated TIO, although many such cases have been reported with other diagnoses {884}. Some tumours may be identified before osteomalacia becomes clinically evident {140}.

#### Macroscopy

Most phosphaturic mesenchymal tumours present as nonspecific soft tissue or bone masses, often with a component of fat. Some may be highly calcified.

#### Histopathology

These tumours are usually composed of

#### Prognostic factors

The overwhelming majority are histologically and clinically benign. Morphologically benign cases frequently recurlocally, but are cured with complete excision, with resolution of osteomalacia (595, 884,968,1494). Malignant tumours may metastasize and cause death from disease.