



Fig. 4: Axial contrast enhanced chest computed tomography at level of the heart showing a lobulated, expansile, non-enhanced mixed density sternal mass (sm) arrow with multiple amorphous calcifications. The mass is compressing the anterior cardiac border

The lung parenchyma and vascular markings and the cardiac shadows appeared quite normal. A conclusion of sternal tumour was made and the possible differential diagnoses were; chondroma, chondrosarcoma and lymphoma.

Histological correlation was advised for further evaluation. She had a successful total excision biopsy of the mass which showed a brownish, hard, well circumscribed tumour mass measuring 11 x 9 x 6cm. The histopathology report of the specimen concluded that the feature was in keeping with osteosarcoma. The patient made remarkable recovery and was discharged home. The patient was placed on a course of chemotherapy and is being followed up. However she was lost to follow up due to financial constraints.

Discussion

Primary malignant sternal tumours are very rare accounting for only 0.3% of sternal tumours in all age groups. The most common malignant sternal tumour is the chondrosarcoma. Osteosarcoma affects males twice as females¹⁻³. The peak age incidence is between 10 and 25 years of age⁴. This patient was a 25 year old female.

Osteosarcoma presents usually with localized pain or swelling at the affected site⁴. In the case of this patient she presented with a painful sternal swelling measuring 15 x 14cm and associated with easy fatigability. Rivera -luna⁵ observed that tumour size of more than 15cm has an unfavourable prognosis. Radiological diagnosis of osteosarcoma can be made by evaluation with plain films, scintigraphy, computed tomography, magnetic resonance imaging