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A Rare Presentation of Angiosarcoma: Insights from an Elderly Patient's Journey

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INTRODUCTION

Angiosarcoma is a rare, high-grade malignancy of vascular endothelial cells. When it arises in bone, it constitutes less than 1% of primary bone sarcomas. Vertebral angiosarcoma is even less common; a minor subset of primary bone sarcomas [1].

We present a case of an 81-year-old male with angiosarcoma to highlight the diagnostic and therapeutic challenges associated with this aggressive tumor.

DESCRIPTION

An 81-year-old male presented with an eight-week history of worsening back pain and episodes of right leg weakness, resulting in multiple falls. His medical history included hypertension, type two diabetes mellitus, and a prior aortic aneurysm repair.

Initial investigations revealed anemia and degenerative disc disease on plain radiographs (Figure 1). MRI of the lumbar spine identified an intradural lesion at the L2 level on 2nd Feb 2024 (Figure 2).

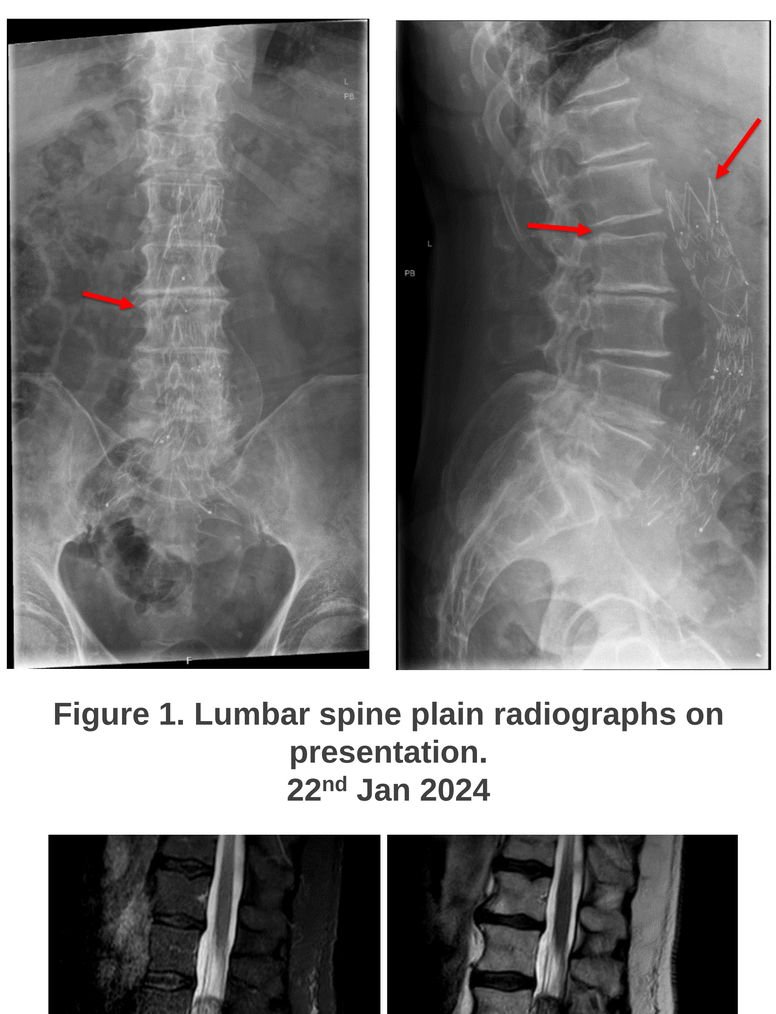

Figure 1. Lumbar spine plain radiographs on presentation.
22nd Jan 2024

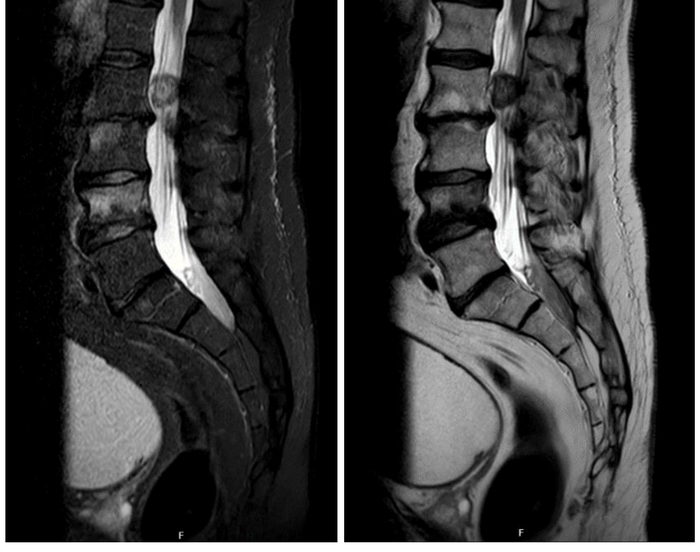

Figure 2. STIR TSE Sagittal (Left)
T2W Sagittal (Right)
2nd Feb 2024

A biopsy of the lesion was taken on 21st Feb 2024, and later, on the 7th of March, it confirmed the diagnosis of angiosarcoma with strong CD31 positivity (Figure 3).

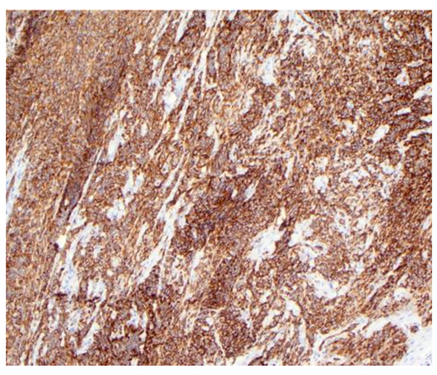

Figure 3. Histology of the lesion

Second imaging on 22nd Feb 2024 revealed multiple progressive metastases including cutaneous and bony lesions (Figures 4 – 7). Given the aggressive nature of the disease, rapid progression, and the patient's poor health status, palliative care was initiated. The patient passed away on 15th of March 2024, eight days after diagnosis.

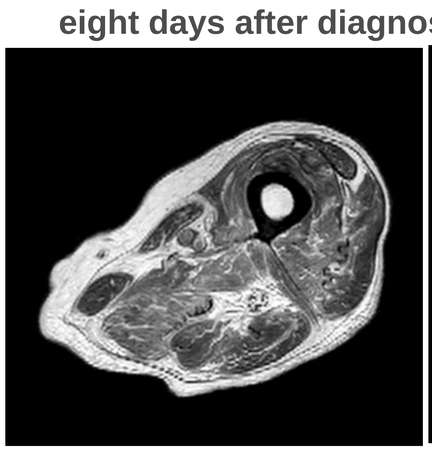

Figure 4. T2W Transverse of left leg; showing the cutaneous lesion.

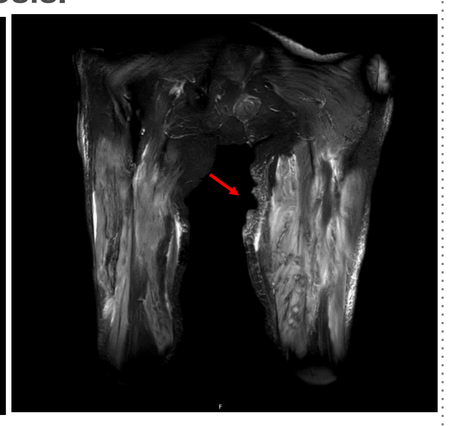

Figure 5. STIR Coronal; showing cutaneous lesion.

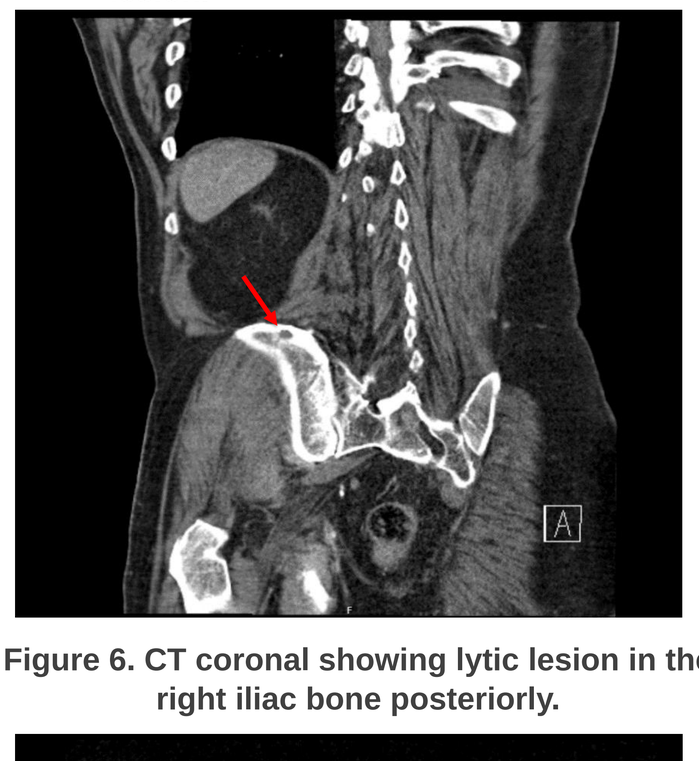

Figure 6. CT coronal showing lytic lesion in the right iliac bone posteriorly.

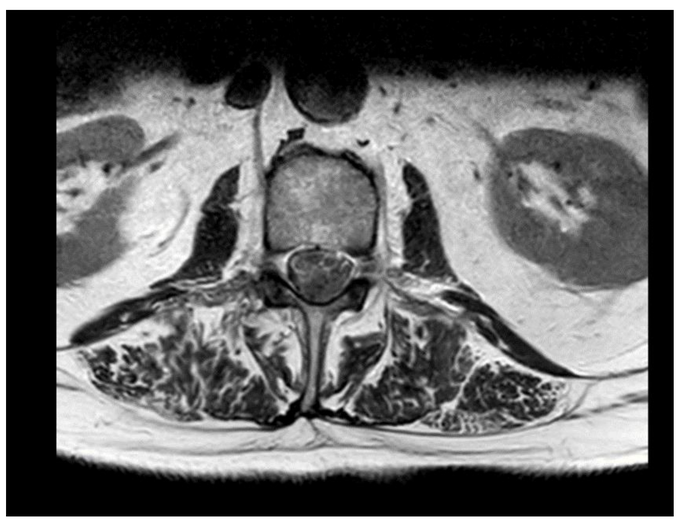

Figure 7. T2W TSE Transverse showing mass progression.

DISCUSSION

Bone Angiosarcoma mostly occurs in the long bones and short tubular bones of the lower limbs such as the femur. It can also occur in the pelvis, ribs or least commonly in the vertebrae like in our patients [2][3].

The rarity of this presentation was one of our main limitations, with the rest being the late onset of presentation and diagnosis, as well as the rapid progression of the disease after the initial presentation. These factors worsened the prognosis [4].

Furthermore, the presence of multiple metastases at diagnosis suggests advanced disease, making early recognition crucial for improving outcomes. The exact cause of angiosarcoma is unknown, however through reviewing the literature several factors have been associated with an increased risk. These include radiation exposure, chronic lymphedema, trauma, infections, and carcinogen exposure, commonly vinyl chloride [4][5][6]. However, in our patient, no specific risk factors were identified, complicating the diagnosis.

CONCLUSIONS

This case underscores the need for awareness of vertebral angiosarcoma in patients presenting with back pain and neurological deficits associated with cutaneous lesions. Our case highlights the importance of considering rare malignancies in patients with unexplained pain or neurological deficits, even in the absence of typical risk factors.

References

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