

MI-COD

MSS INDIA- Case Of the Day



18/10/2024

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Musculoskeletal Society of India (MSS) &
Indian Journal of Musculoskeletal Radiology
(IJMSR), the official publication of MSS India

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34-year-old gentleman with a complex past medical history, including a liver transplant in 2017 due to primary sclerosing cholangitis, presented with a lesion in the right proximal humerus, on a whole-body PET CT

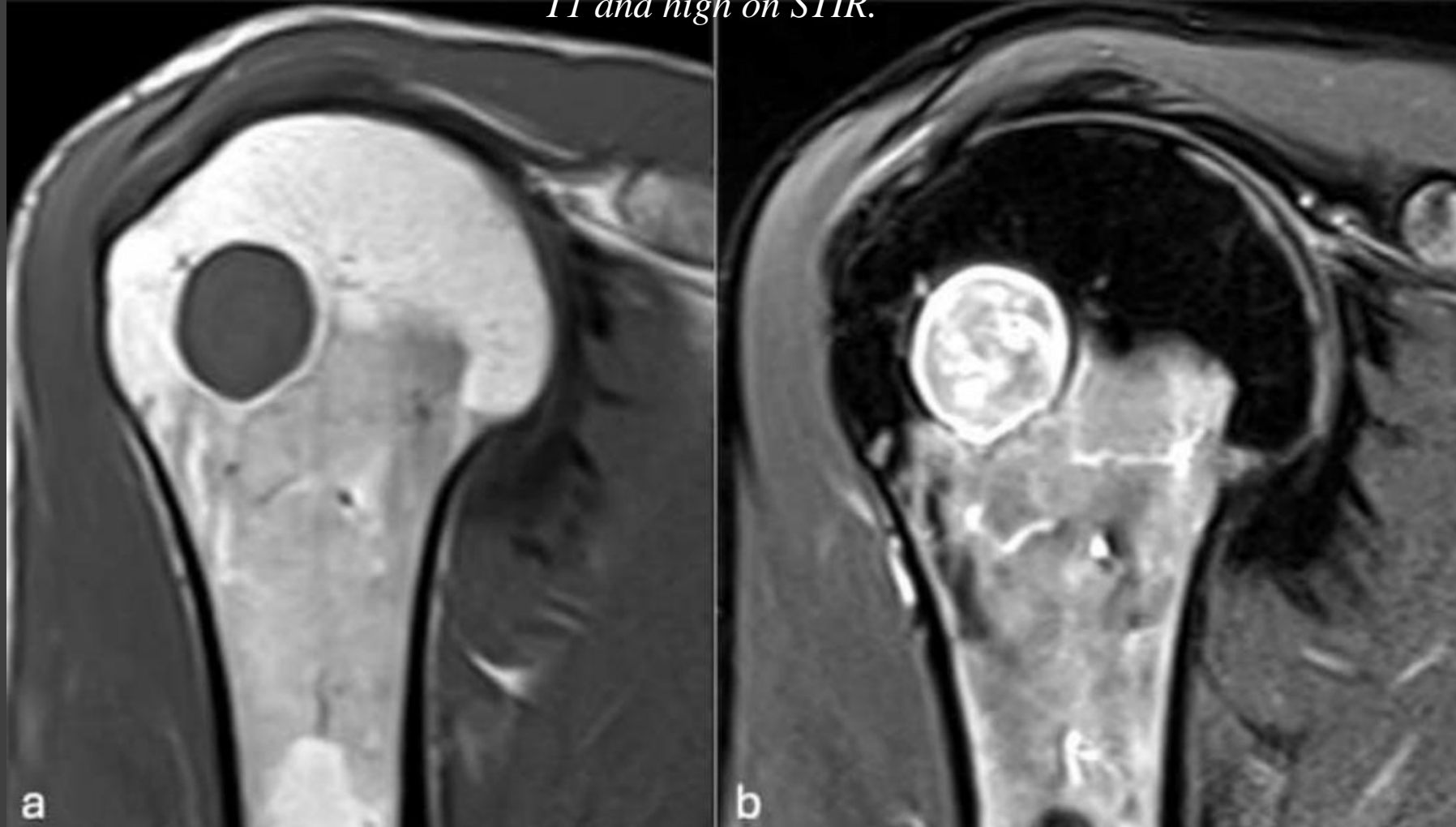
Figure 1. Anteroposterior radiograph (a), CT (b) and PET-CT(c) of right shoulder show a lucency (arrow) in the right humeral head with a faint sclerotic rim. Axial FDG PET-CT (c) shows high avidity (SUV-6.2) within the lesion (arrow).



He had experienced shoulder pain intermittently for the past four years. The maximal SUV (Standardized uptake value) of 6.2 of the lesion, and a CT-guided biopsy was performed.

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Figure 2. Coronal T1(a) and STIR (b) of right shoulder show a rounded lesion (arrow) in the right humeral neck which is low on T1 and high on STIR.



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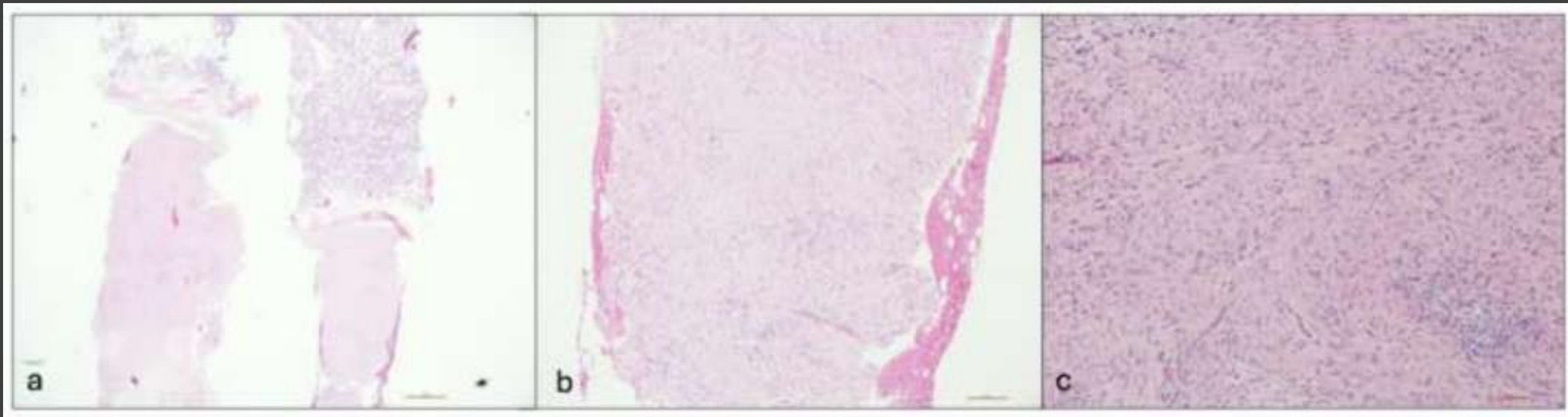


Figure 3. Haematoxylin and eosin stain (a), 400x(b and c) showing bone cores partly replaced by a spindle cell tumour with low to moderate cellularity with well-demarcated borders (a). Spindle cells arranged in interlacing fascicles with eosinophilic cytoplasm(b). Spindle cells show very mild nuclear pleomorphism, bright eosinophilic cytoplasm and elongated nuclei with a lack of conspicuous mitotic activity and necrosis (c).

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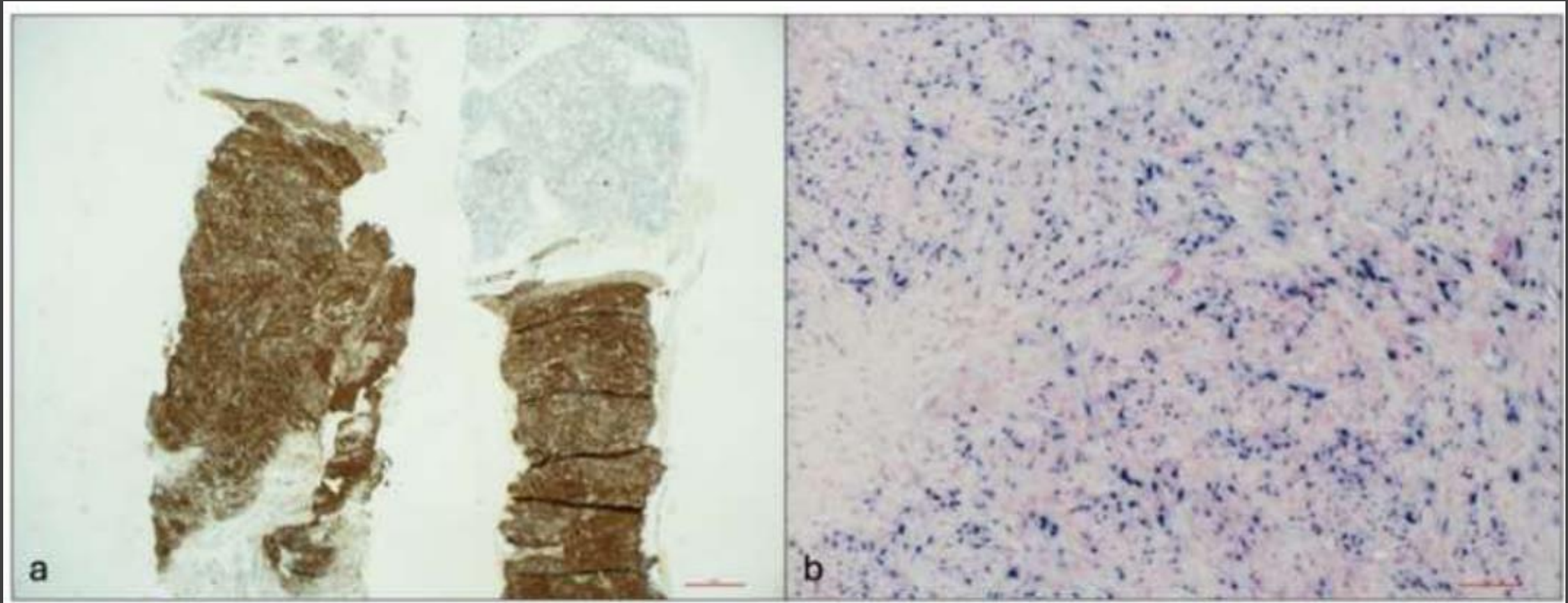


Figure 4. Immunohistochemistry (a) demonstrating tumour cells expressing diffused SMA positivity (SMA stain). EBER in-situ hybridization (b) revealing nuclear positivity in tumour cells (EBER ISH).

Epstein-Barr Virus associated smooth muscle tumour

EBV associated smooth muscle tumour

- While EBV-associated smooth muscle tumours typically occur in immunocompromised individuals, their presentation in bone is exceedingly rare.
- Previous studies suggest that these tumours do not correlate well with traditional histological features and are unlikely to metastasize. Their biological behavior, although not well documented, generally indicates a benign nature
- The differential diagnosis for bone lesions in post-transplant patients is broad, but imaging and a low Ki-67 proliferation index of less than 5% suggests that this lesion is more likely to be stable rather than progressive
- The multidisciplinary approach will ensure comprehensive care, especially considering potential complications related to his immunosuppressive therapy.