

Prostate Cancer and Sarcoma: Challenges of Synchronous Malignancies

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CASE REPORT

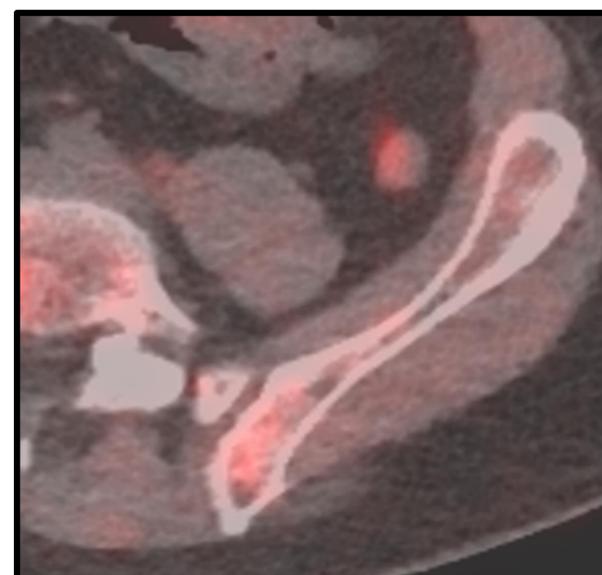
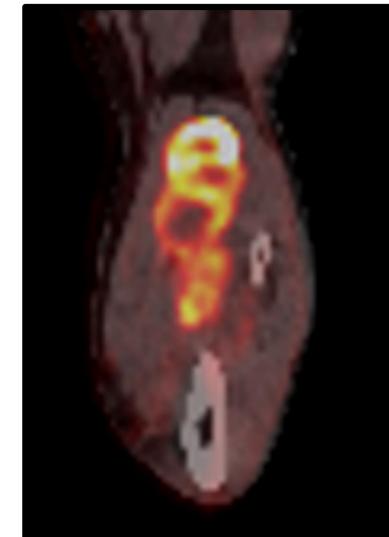
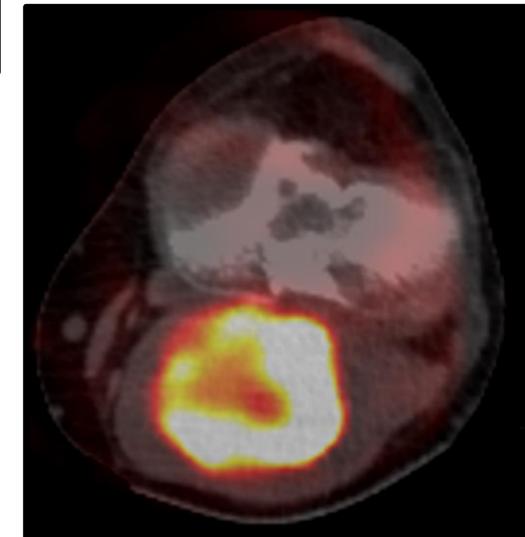
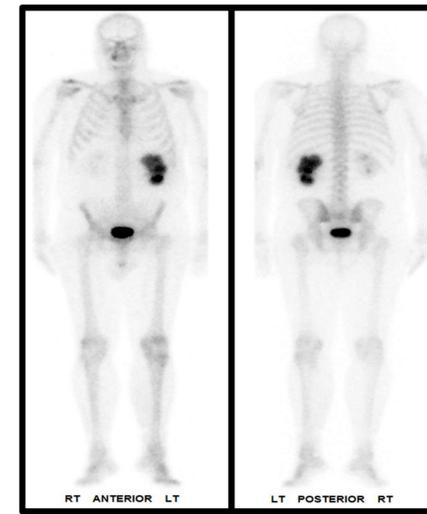
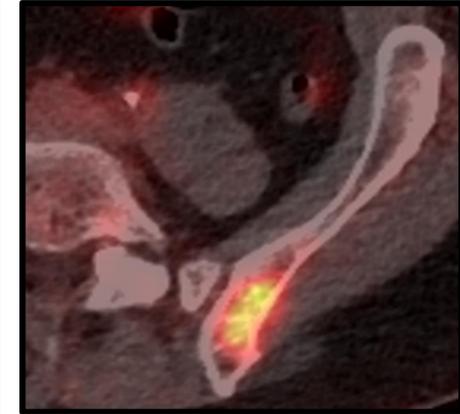
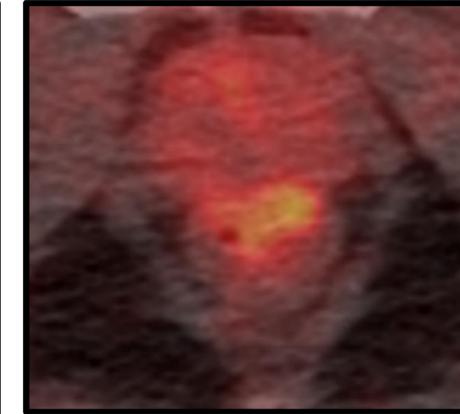
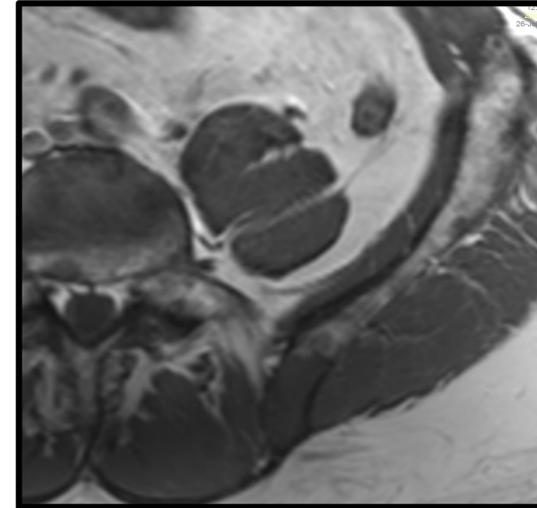
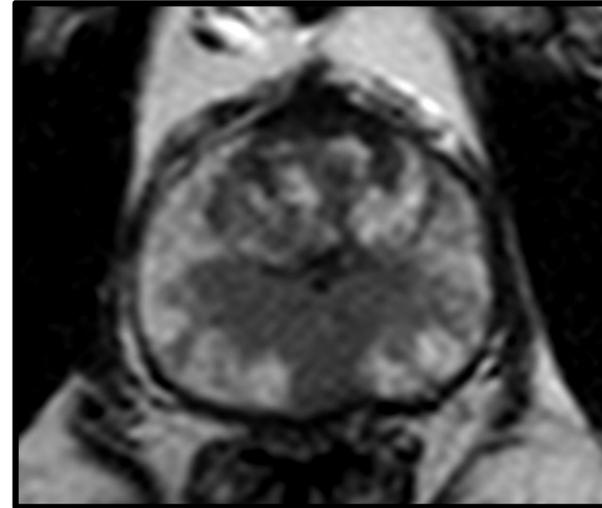
Synchronous primary malignancies are a rare finding. We present the case of a 57-year-old patient who was diagnosed with prostate cancer on pelvic MRI. A skeletal metastasis was also seen, although no osteoblastic activity or sclerosis was identified on skeletal scintigraphy or CT respectively.

The patient was started on hormonal therapy and follow-up imaging revealed the prostate cancer to have reduced in volume. The skeletal lesion appeared unchanged and an F18-choline PET study was negative. A CT guided bone biopsy demonstrated metastatic leiomyosarcoma and an F18-FDG PET study was performed to identify the primary lesion. This demonstrated a large necrotic tumour within the calf and the patient was referred to a tertiary sarcoma unit. This case highlights the challenges involved in diagnosing and managing synchronous malignancies.

References

Vogt A, Schmid S, Heinemann K, Frick H, Herrmann C, Cerny T et al. Multiple primary tumours: challenges and approaches, a review. ESMO Open. 2017;2(2):e000172.

Chun-Sing W, Nan-Jie G, Yiu-Ching C. Prevalence of synchronous second primary malignancy: identification using whole body PET/CT imaging. Clinical Imaging. 2014;38(2):179-186.



Central prostate cancer with a left iliac wing metastasis as seen on MRI. This was not lytic on CT and non-avid on bone scintigraphy or F18-choline PET. F18-FDG PET (top right) identified the other synchronous cancer within the calf. The bone metastasis was also FDG avid, the prostate cancer was not.

LEARNING POINTS

- Atypical presentations of bony metastatic disease and abnormal sites of lymphadenopathy should prompt further investigations to rule out a synchronous primary.
- PET CT can assess distant organ systems including the limbs and is useful in suspected cases of synchronous malignancy. Appropriate radiotracer selection is key.