

^{99m}Tc -MDP uptake in fibrosarcoma in a cat

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Case description

A 10-year old mixed-breed domestic cat was presented for a bone scintigraphy with a soft tissue tumour of one year duration. The tumour, at the time of scintigraphic examination, was 4 cm in diameter and was localized medially in the upper dorsum. Pathologic diagnosis based on fine needle biopsy was fibrosarcoma. The aim of the scan was to assess the bone involvement with eventual metastases prior to operation. Bone scanning was performed in anterior, posterior and lateral projections using dual-head gamma camera Multispect-2 (Siemens, Erlangen, Germany), 3 hours post-injection of ^{99m}Tc -MDP (OBRI-Polatom, Otwock, Poland) of activity of 370 MBq.

The bone scan (Figure 1) revealed an accumulation of ^{99m}Tc -MDP in the primary tumour (arrow) and no pathological uptake in bone structures. Intra-operational findings confirmed those data.

Commentary

Soft-tissue accumulation of osteotropic radiotracer was mainly shown previously in metastases of primary osteosarcoma, both in humans and animals [1–3] or in primary soft-tissue osteosarcoma cases [4–7]. In this case, we showed a tracer accumulation scintigraphically in a relatively rarely described tumour: primary soft-tissue fibrosarcoma. Since both the diagnostic and therapeutic radionuclides have the avidity to accumulate in osteosarcoma [8], perhaps this might be of use in future for therapeutic purposes, also in humans.

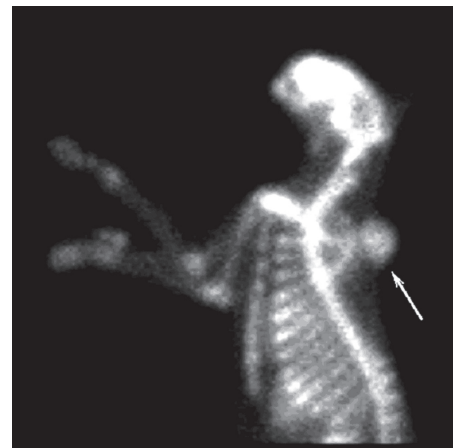


Figure 1. Bone scan of a feline patient. Accumulation of radiotracer in a primary fibrosarcoma pointed with arrow.

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