

Osteosarcoma Pulmonary Metastasis Mimicking Abnormal Skeletal Uptake in Bone Scan

Utility of SPECT/CT

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Abstract: We present a case of a 15-year-old boy with osteoblastic osteosarcoma of the left distal femur. The patient was referred to bone scan for initial staging.

On planar bone scan, there is increased uptake of ^{99m}Tc -MDP (^{99m}Tc -methylene diphosphonate) in the left distal femur. There are also multiple sites of abnormal tracer uptake projecting to the thoracic cage, initially assumed to be localized in the ribs. SPECT/CT correctly identified them as pulmonary metastases.

This case illustrates the potential advantages and utility of SPECT/CT imaging of skeletal bone scan in order to decide on the optimal treatment.

Key Words: bone scintigraphy, lung metastasis, osteosarcoma, SPECT/CT

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