Abdominal ventral hernia identified incidentally on a Tc-99m MDP scan

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ABSTRACT

Bone scintigraphy is widely used technique for evaluation of many bone disorders. Normally, bone imaging shows slight uptake in soft tissues. Most of the previous reports revealed that majority of the soft tissue lesions detected on bone scans usually have abnormally increased uptake. We present here a 70-year-old woman with a large photopenic defect in the left lower abdominal quadrant. Clinical correlation confirmed the presence of abdominal ventral hernia.

Key Words: Tc-99m MDP, Abdominal Ventral Hernia, Bone Scintigraphy

Fig 1. A 70-year-old woman who had chronic renal failure with a complaint of pain in her anterior chest, caused by a fall, underwent Tc-99m MDP bone scintigraphy. Whole-body skeletal scintigraphy obtained 3 hours after injection of 20 mCi Tc-99m MDP demonstrated areas of increased uptake in the sternum, right and left ribs anteriorly, left humerus, both femoral greater trochanter and knees. The scan appearances in the chest were strongly suggestive of traumatic fracture and the lesions in the femur and knees suggested osteodegeneration. In addition to these lesions, there were a large cold area with an increased uptake around the periphery of the defect in the left lower abdominal quadrant anteriorly (arrows). Its shape and contour were well defined. The patient’s medical history and physical examination revealed the presence of an abdominal ventral hernia corresponding to the photopenic defect. She had no history of abdominal surgery. Most reported cases of soft tissue lesions on bone scintigraphy include increased accumulation (1-5). On the other hand, the reports about photopenic defects in the soft tissue on bone scan are rare. Other conditions reported to cause cold lesions in soft tissue on bone scintigraphy include soft tissue metastases, scrotal diseases (hydrocele, torsed appendix testis, air-filled loops of bowel in the scrotum and hematoma), attenuation artifacts, and soft tissue operations (4-10).

References