

Soft Tissue Involvement in the Nephrectomy Area on the Bone Scintigraphy Tc-99m MDP of a Patient Underwent Radical Nephrectomy

Radikal Nefrektomili Bir Hastada Kemik Sintigrafisinde Nefrektomi Alanında Yumuşak Doku Tutulumu

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Soft tissue involvement in bone scintigraphy is related with several reasons such as, neoplasia, hormonal effect, ischemia, inflammation, trauma and imaging failure (1). Mechanism of increased extraosseous uptake of technetium-99m methylene diphosphonate (Tc-99m MDP) is dependent of extracellular fluid expansion, increased regional vascularity, permeability and increased tissue calcium concentration (2). Seventy years old male patient, underwent left radical nephrectomy due to the renal cell carcinoma, bone scintigraphy, was taken due to the lung metastasis and flank pain. Patient had no comorbidity, other than (out of) hypertension. Whole body and spot bone scintigraphy was taken after 3 hours of 20 mCi Tc-99m MDP injection. A mass with low activity was seen around the location of the radical nephrectomy side in the anterior projection images of bone scintigraphy (Figure 1-a). Bone

scintigraphy was concomitantly evaluated with abdominal CT and F-18 FDG PET-CT. The mass with low activity defined in the bone scintigraphy was confirmed as 2.9 cm hypermetabolic mass located in left renal lodge (Figure 1-b). By the enlightening of this case, history taking, and the confirmation and correlation with other imaging methods are quite important to achieve better knowledge and quick diagnosis during evaluation of bone scintigraphy.

References

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Figure 1-a. A mass with low activity was seen around the location of the radical nephrectomy side in the anterior projection images of bone scintigraphy. **Figure 1-b.** The F-18 FDG PET/CT images of the abdomen indicate 2.9 cm hypermetabolic mass located in left renal lodge.



Figure 1-a

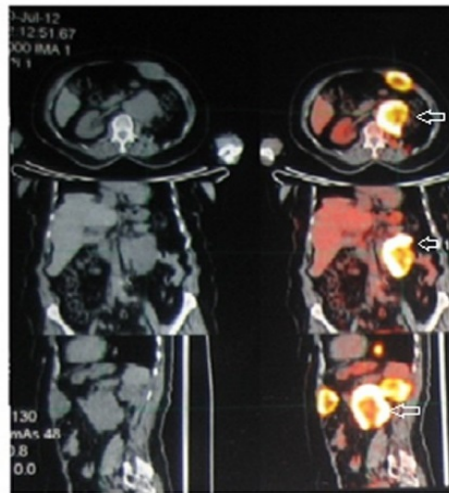


Figure 1-b

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Geliş tarihi / Received: 20.01.2014 Kabul tarihi / Accepted: 12.02.2014

Çıkar Çatışması / Conflict of Interest: Yok / None