

Extraskelatal osteosarcoma: Extensive tumor thrombus on fused PET-CT images

Ukihide TATEISHI,* Umio YAMAGUCHI,** Takashi TERAUCHI,*** Tetsuo MAEDA,*
Noriyuki MORIYAMA,*** Yasuaki ARAI* and Tadashi HASEGAWA****

*Divisions of *Diagnostic Radiology and Nuclear Medicine, and **Orthopedic Surgery, National Cancer Center Hospital
***Division of Radiology, Research Center for Cancer Prevention and Screening, National Cancer Center
****Department of Clinical Pathology, Sapporo Medical University School of Medicine*

A 30-year-old woman developed extraskelatal osteosarcoma in the right buttock and thigh. Radiographs and unenhanced computed tomography (CT) showed a large, multilobulated mass accompanied by mineralized matrix. Contrast-enhanced CT and magnetic resonance (MR) images showed extensive tumor thrombus in the right internal- and external iliac veins. Co-registered positron emission tomography (PET) and CT images showed abnormal F-18 2-fluoro-2-deoxy-D-glucose (FDG) uptake in the tumor thrombus. PET study in our patient provided information concerning disease extent and viability of tumor thrombus.

Key words: FDG-PET, osteosarcoma, extraskelatal osteosarcoma, tumor thrombus