

Sacral insufficiency fracture detected by FDG-PET/CT: Report of 2 cases

Tatsuro TSUCHIDA, Nobuyuki KOSAKA, Katsuya SUGIMOTO and Harumi ITOH

Department of Radiology, Faculty of Medicine, University of Fukui

We report 2 cases of sacral insufficient fracture detected by FDG-PET/CT. In case 1, a 79-year-old female patient with malignant lymphoma, who had recent lumbago, received FDG-PET/CT examination. Vertical linear FDG uptake medial to bilateral sacro-iliac joint was observed on FDG-PET and a fracture line corresponding to FDG uptake was observed in bone window of CT images. In case 2, an 81-year-old male patient with colon cancer, who also complained of lumbago, received FDG-PET/CT examination. Vertical linear FDG uptake medial to bilateral sacro-iliac joint and horizontal uptake which connects vertical line (H-shaped) was demonstrated and CT also demonstrated a fracture line corresponding to FDG uptake. H-shaped high intensity area corresponding to FDG uptake was observed on T2-weighted image of MRI. On bone scintigraphy, H-shaped uptake was also observed. Like bone scintigraphy, typical H-shaped FDG uptake may be diagnostic in sacral insufficiency fracture. Adding CT information to FDG-PET, that is, assessing SIF with FDG-PET/CT may be useful when atypical findings are observed.

Key words: FDG-PET, PET/CT, sacral insufficiency fracture, H-sign