An Incidental Meningioma Glittering in Bone Scan

NurAydinbelge F, Aylin Akbulut*, Gokhan Koca and Meliha Korkmaz

Department of Nuclear Medicine, University of Health Sciences, Ankara Application and Research Hospital, Turkey

Clinical Image

A 63-year-old female with colon adenocarcinoma was referred to bone scan for evaluation of persistent back pain. The bone scan with Tc-99m Metilen Diphosphate (MDP) has shown non homogeneous radiotracer distribution and relatively increased MDP uptake in L3 and L5 vertebrae and in sacrum, which were suspected of vertebrae metastasis (Figure 1). Subsequent, F-18 fluorodeoxyglucose PET/CT (FDG-PET/CT) has shown relatively increased FDG uptake in lumbar vertebrae which were concordant with osteo-degenerative changes. Additionally a calcified nodular lesion about 13 mm in size was recognized in CT at centrum semi-ovale in the fronto-parietal region close to vertex without any significant FDG uptake (Figure 2). When bone scan was re-evaluated, there was an area of focal increased MDP accumulation at the fronto-parietal of intersection, which

Figure 1: (A) Blood pool phase of bone scan without apparent hyperemia in the body. (B) Whole body images of bone scan showing focal uptake in the calvarium (black arrow) without any trauma history. (C) Anterior static bone imge is showing the focal bone lesion (black arrow). (D) Posterior static bone image.

Figure 2: Coronal, sagittal and axial images of non-contrast CT showing hyper dense calcified lesion with fiducial lines.

Figure 3: (A) T1-weighted coronal, (B) sagittal and (C) axial MRI with fat-sat is showing thick and intense contrast enhancement in the meningiomas with iso-intense signal in the center due to its calcific portion.
was overlooked for being a possible traumatic lesion. Afterwards, brain Magnetic Resonance Imaging (MRI) demonstrated an extra-axial solid nodular lesion in the right fronto-parietal intersection 22 mm × 16.5 mm in size, with an intense peripheral contrast enhancement and an iso-intense center without contrast enhancement due to calcification on T1 weighted MRI which was consistent with imaging features of a calcified meningioma (Figure 3).