A 7-year-old child presented with history of left foot trauma 2 years ago with persistent pain on walking. Three phase bone SPECT-CT scan was performed after intravenous injection of 250MBq of Tc99m MDP. Initial dynamic images (A) displayed increased blood flow and pool activity in the left mid-foot region. On delayed planar (B) and SPECT-CT (C) views, focal radiotracer uptake is demonstrated along with irregular cortical margins of navicular bone, fragmentation and patchy sclerosis. Mild soft tissue changes are appreciated postero-inferiorly. Findings are in keeping with reparative phase of navicular avascular necrosis (AVN); Kohler disease. It is a rare, painful, self-limiting childhood (4-6 years) bone disorder, with predilection to males, first described by Dr. A Kohler, in 1908. AVN of navicular bone can be secondary to vascular accidents, coagulation abnormalities or heredity etiology. Navicular is the last tarsal bone to ossify and can be affected by abnormal strain. Diagnosis is based on clinical symptoms and characteristic radiographic appearance; wafer-like, fragmented navicular bone demonstrating patchy sclerosis, often associated with soft tissue swelling. CT scan is not routinely done. Bone scintigraphy is useful in cases where clinical symptoms and radiography is non-diagnostic. Photopenia in early phase of AVN and subsequent increased uptake during reparative phase are characteristic bone scan findings. Hybrid SPECT-CT imaging provides detailed anatomical information in conjunction with metabolic status for the evaluation of AVN as compared to conventional radiography.

References