
In-111-leukocytes scans used for detecting inflammatory lesions of bone and joint diseases were compared with Tc-99m MDP bone scans in 30 cases. Sixteen cases showed abnormal radionuclide accumulation to the lesions in both scans, and 13 cases showed no accumulation. In-111-leukocytes scans of one of 3 Brodie's abscesses was negative in both scans. Six cases whose scans showed intensive accumulation in the lesions were 3 recurrent chronic osteomyelitis, 1 pyogenic arthritis and 2 rheumatoid arthritis. Mild accumulation of In-111-leukocytes was observed in post-treatment states of chronic osteomyelitis, arthritis, juvenile rheumatoid arthritis, as well as metastatic bone tumor and malignant fibrous histiocytoma. No accumulation of In-111-leukocytes was observed in tuberculous spondylitis and tuberculosis of the hip joint. In-111-leukocytes scan was clinically more useful than Tc-99m MDP bone scan in evaluating the acute inflammatory processes of bone and joint diseases.


We performed bone scintigraphy in patients with gout and compared the findings with clinical and x-ray findings. The purpose of this paper is to present the results.

Subjects and Method: From 200 gouty patients under treatment at the department 23 in whom both bone scintigraphy and x-ray examination were performed were chosen for the study. Scintigrams of bones were made 3 hours after the intravenous injection of 15 mCi Tc-MDP at regular 6-month intervals. Results: 87.5% of bone scintigrams made at the time of an attack were positive. Well controlled cases with asymptomatic remission provided negative scintigraphic findings of bone even if x-ray findings were remarkable. On the other hand, those cases where there were unequivocal inflammatory symptoms of the joints involved exhibited areas of excessive radioisotope accumulation in the affected locality even when x-ray findings were not remarkable. These results led us to conclude that bone scintigraphy, when used in the follow-up observation of the therapeutic course of gout, proves to be useful as a means of making localizing diagnosis of involved joints and of evaluating disease activity at the affected locality.