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SKELETAL SCINTIGRAPHY ON THE OSTEOPOIKILOSIS
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Scintigraphic skeletal study was performed in 6 cases of the osteopoikilosis including 4 cases of the benign bone island, which may be a solitary type of the osteopoikilosis.

The materials were selected incidentally from among the patients who had the skeletal radiography. The radiographic figure shows round and spheroid in shape, and the size ranges 2 mm and 50 mm in diameter. The location of the lesion was the epiphysis of the long bone, pelvic bones or the vertebral body on radiograph.

Images were obtained 3 hours after the intravenous injection of 2 mmCi to 10 mmCi of 99mTc-methylene diphosphonate(99m-MDP) and they were compared with radiographs.

Scintigraphy was positive in 2 cases (33%). One was the single lesion which size shows 25 mm in diameter on radiograph in the proximal metaphysis of the left femor and anther case had multiple tiny lesions in the left humeral head and in the left femoral head.

Less clinical significances of the osteopoikilosis have been evaluated. However, the positive scintigraphy on this entity means that the lesion may be unstable because the positive scintigraphy by 99m-MDP might suggest the active metabolism in the lesion of the bone.

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QUANTITATIVE ASSESSMENT OF BONE SCINTIGRAPHY IN OSTEOMYELITIS.
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We were performed bone scintigraphy in 15 cases of osteomyelitis. 20mCi of Tc-99m-MDP was injected intravenously and recorded accurately for 5 minutes 3 hours after the administration. And the regions of interest were made and counted the uptake using the scintillation camera equipped with a medical computer. The uptake ratio between affected and non-affected bone lesion was calculated.

The uptake ratio was correlated with erythrocyte sedimentation rate(r=0.57).

In conclusion, quantitative assessment of bone scintigraphy would be a good method for evaluating the activity of osteomyelitis.

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BONE SCINTIGRAPHY OF FREE VASCULARIZED BONE GRAFT.
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We studied the value of bone scintigraphy in free revascularized bone grafts in twenty-three cases. The cases were divided into two different groups in revascularized fibular graft and iliac bone graft, and scintigraphy was carried out using technetium-labeled methylene diphosphonate.

There was a difference in intensity of the scintigrams over the middle area of grafted bone between fibula and iliac bone. Fibular grafts always had normal uptake of the radionuclide at the middle part of the graft. Iliac bone grafts had increased uptake of the radionuclide at the middle part of the graft on the initial bone scintigrams, and changed gradually for normal uptake of the radionuclide.

A hot spot with increased uptake of the radionuclide was noted over the graft-host junction in both groups.