Visualization of the bone/bone marrow of lower extremities in Ga-67 whole-body images

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Patients whose Ga-67 whole-body images showed increased uptake by the bone/bone marrow of the lower extremities were selected and classified into three types according to the extent and the grade of the visualization. These types were then compared with their serum iron levels, iron-binding capacities, and the results of several other serum biochemical tests. Of 374 consecutive whole body 72-hr images reviewed, 59 (15.8%) showed increased uptake of the tracer by the bone/bone marrow of the lower extremities. The three classified types were as follows: type T—visualization of both tibiae and femurs; type S—strong visualization of the femurs; and type W—weak visualization of the femurs. The serum iron concentration was significantly high in type T and low in type S. In conclusion, the pattern of Ga-67 uptake by the bone/bone marrow of the lower extremities fairly closely reflects the status of iron metabolism.

Key words: Ga-67 scan, Serum iron, Serum UIBC, Bone/bone marrow visualization