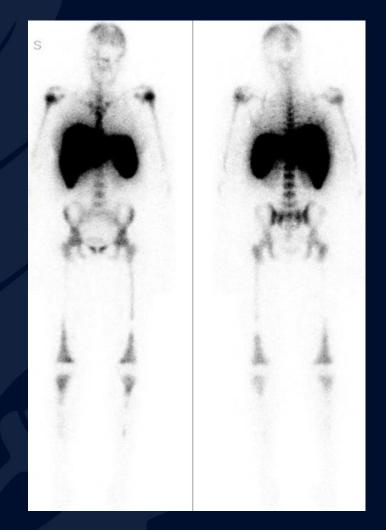
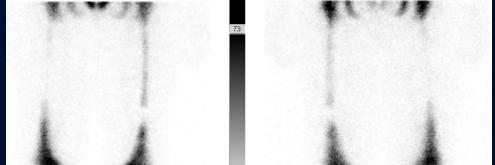
21 y/o male with Sickle Cell disease presents with leg pain.

Edward Gillis, DO







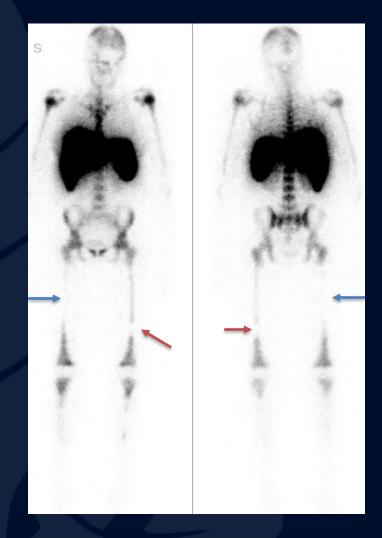


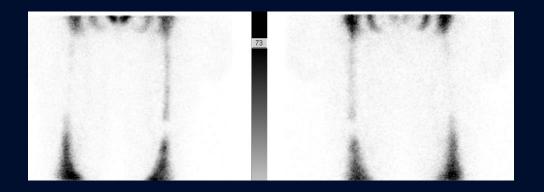




Bone Infarcts







Tc-99m Sulfur colloid scan showing decreased marrow uptake within the proximal femoral shaft (blue arrow), a segmental defect within the distal left femoral shaft (red arrow), and patchy activity within the tibial shafts, compatible with bone infarcts.



Bone Infarct

Imaging Features

- Tc99m Sulfur Colloid
 - Decreased uptake in areas of infarction
- Tc99m-MDP Bone Scan
 - Decreased uptake in acute phase
 - Increased uptake in subacute phase



Bone Infarct

General Features

- Axial skeleton and long bones most frequently involved
 - Proximal femur/humerus/tibia are most common sites
 - Distal femur often involved
- Sulfur colloid localizes in marrow reticuloendothelial system
 - Decreased activity in bone marrow following a vasoocclusive event secondary to marrow edema



References

- Ejindu, Vivian C., et al. "Musculoskeletal Manifestations of Sickle Cell Disease." RadioGraphics, vol. 27, no. 4, 2007, pp. 1005– 1021., doi:10.1148/rg.274065142.
- 2. Kim, S K, and J H Miller. "Natural history and distribution of bone and bone marrow infarction in sickle hemoglobinopathies." *Journal of nuclear medicine : official publication, Society of Nuclear Medicine.*, U.S. National Library of Medicine, July 2002, www.ncbi.nlm.nih.gov/pubmed/12097459.

