IMAGING IN ONCOLOGY: RADILOGIC ABNORMALITIES IN THE LEGS

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Case Description:

A 73-year-old woman presented with right hip pain and a history of lung cancer. Radiographic studies showed marked periosteal proliferation, most notably in the long bones (Fig 1). Subsequently, anterior and posterior whole-body bone imaging was performed using 28.0 mCi of technetium 99m hydroxymidiphosphonate (HDP) administered intravenously. Increased bilaterally symmetric uptake along the cortices of the femurs and tibia was observed (Fig 2).

Which is the most likely diagnosis?

1. Chronic venous stasis
2. Osteoarthritis
3. Hypertrophic osteoarthropathy
4. Multifocal osteomyelitis
5. Thyroid acropachy
6. Hypervitaminosis A

Fig 1. — Marked periosteal proliferation, most notably in the long bones.

Fig 2. — Increased bilateral symmetric uptake along the cortices of the femurs and tibia.