

Superscan Pattern as a Debut of Gastric Cancer

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Clinical Image

A 59-year-old male was admitted for generalized abdominal pain for a month, associated anemia, thrombocytopenia, and elevated alkaline phosphatase. An upper digestive endoscopy was performed, showing ulceration on the anterior face of the gastric body-antrum with characteristics of malignancy. A histopathology study of the biopsy sample revealed a high-grade poorly differentiated infiltrating tubular adenocarcinoma.

Abdominal-enhanced CT images revealed multiple metastatic lesions in vertebral bodies and pelvic bones.

Full body scintigraphy showed multifocal enhancement on the skeleton and absence of renal visualization (typical pattern of superscan), suggestive of bone metastatic spread [1,2]. Subsequently, a bone marrow aspiration of the sternum was performed, which confirmed metastatic infiltration of the bone marrow due to gastric neoplasia.

Osteoblastic metastasis associated with gastric cancer is considered a relatively uncommon phenomenon [2].

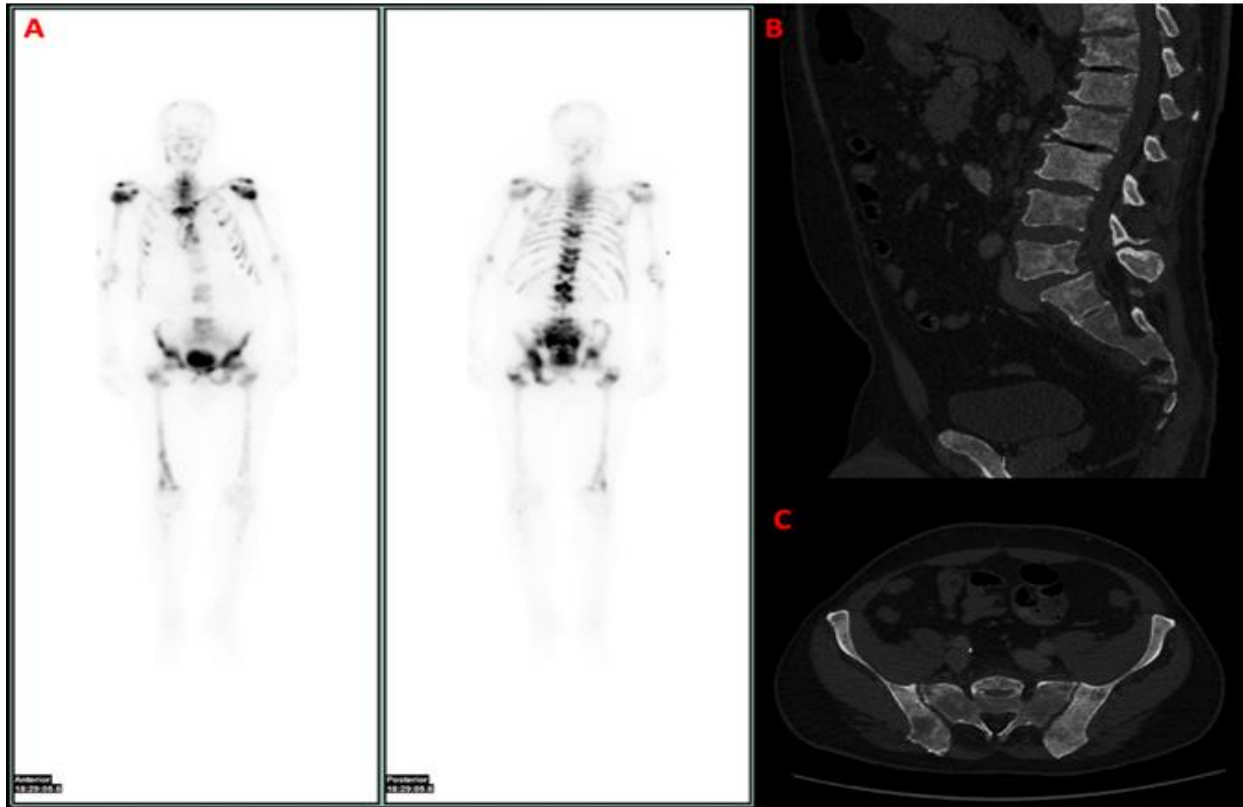


Figure 1: A). Full-body bone scintigraphy. Planar images in anterior and posterior projection were obtained after intravenous administration of hydroxy-methylene-diphosphonate labeled with Tc 99, identifying pathological tracer deposits in multiple skeletal locations (cranial shell, right parietal bone, mandible, cervical, dorsal and lumbar vertebrae, bilateral anterior and posterior costal arches, humeri, sacroiliac joints, sacrum, iliac bones, right ischium, proximal third of both femurs and mid-distal third of the right femur) and absence of renal visualization (typical pattern of superscan), suggestive of bone metastatic spread. B, C). Sagittal and axial abdominopelvic computed tomography with bone window show diffuse metastatic involvement in dorsal and lumbar vertebrae, sacrum, iliac bones, and sacroiliac joints.

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