

Clinical Image

Gigantic Secondary Pelvic Chondrosarcomas: A Case Report

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Abstract

Chondrosarcoma is a malignant tumor of cartilage-forming cells. We present a case of a 36-year-old female with an infiltrative, lytic process involving the right hip, extending to the upper femoral diaphysis and pelvis, secondary to sarcomatous degeneration of an exostosis.

Keywords: Chondrosarcoma, Imagery, Exostosis.

Case

A 36-year-old female presented to the emergency department with bilateral low back pain, more severe on the left side. Clinical examination revealed an enlarged and painful right thigh with tenderness in both flanks, more pronounced on the left. An abdominopelvic CT scan showed an infiltrative, lytic process involving the right hip, extending to the upper femoral diaphysis and pelvis. (Figure 1 “a”). The mass had lobulated contours and cartilage-type calcifications (Figure 2). It invaded the pelvic portions of the ureters, causing bilateral hydronephrosis, more pronounced on the left (Figure 1 “b”). Pelvic, inguinal, and mesenteric masses with similar scanographic characteristics indicated secondary lymph node involvement (Figure 1 “c”). The bone window showed a pedunculated bone exostosis in the upper third of the right femoral diaphysis (Figure 1 “d”), suggesting secondary sarcomatous degeneration.

Discussion

Chondrosarcomas are malignant cartilaginous tumors with diverse clinical behaviors [1], often originating from osteochondromas or enchondromas [1]. Secondary chondrosarcomas typically affect younger individuals, with an average age of 34 years [2]. Most cases arise sporadically, but 5% result from malignant transformation [1]. Radiographic signs of malignancy include growth of a previously unchanged osteochondroma, irregular lesion surface, focal osteolysis, erosion or destruction of adjacent bone, and a substantial soft tissue mass with scattered calcifications [2], consistent with our findings.

Key Clinical Message

Recognizing the radiographic signs of malignant transformation in secondary chondrosarcomas, such as growth of an osteochondroma, irregular surfaces, and substantial soft tissue masses, is crucial for early diagnosis and improved patient outcomes.

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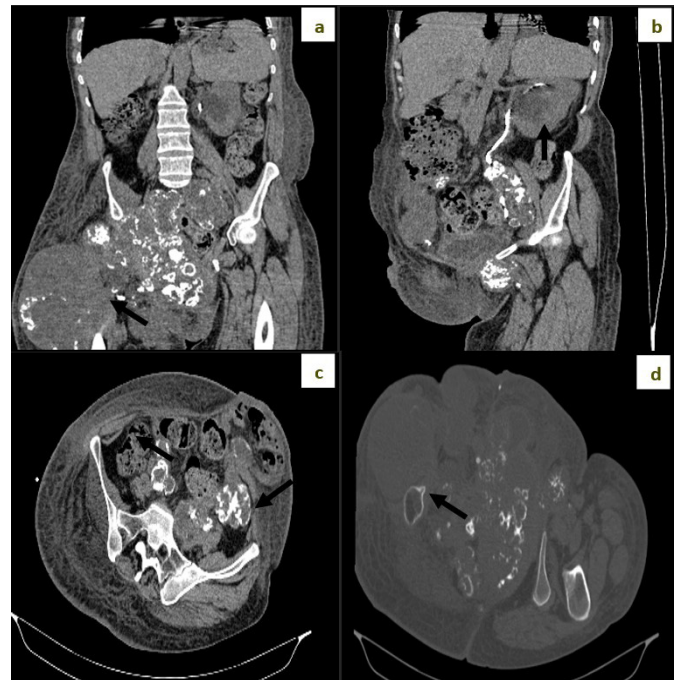


Figure 1: Abdominopelvic CT scan in coronal (a), sagittal (b), and axial (c) views, as well as axial view in bone window (d), reveals an infiltrative, lytic tissue process involving the right hip, extending to the upper part of the homolateral femoral diaphysis with pelvic extension (a), causing bilateral hydronephrosis (b). Intra-peritoneal mesenteric lymphadenopathy (c). Pedunculated bone exostosis in the upper third of the right femoral diaphysis (d).

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Figure 2: 3D Reconstruction: Large lytic lesion process of the right hip extending to the pelvis, containing cartilaginous calcifications.

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