Charcot's Arthropathy of the Hip

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Charcot's arthropathy is a degenerative condition of the joints secondary to a neurologic lesion, resulting in deformity and increased bone reabsorption¹. Misdiagnosis as osteomyelitis or neoplasm is frequent.

A 67-year-old man with a 19-year history of posttraumatic sensorimotor paraplegia, depression, and alcoholism was evaluated for weight loss of 4 kg over 2 months. At examination, he was depressed, malnourished, and emaciated. Sensorimotor paraplegia was confirmed at neurologic examination, and deep sacral decubitus ulcers were found. Blood tests revealed increased inflammatory indicators and macrocytic anemia with vitamin B12 deficiency; blood cultures were negative. Although the clinical presentation was conceivably secondary to depression- and alcoholism-related malnutrition, plain radiographs of the pelvis (Figure 1A) and a computed tomography scan (Figure 1B) ruled out neoplasm or chronic osteomyelitis associated with the decubitus ulcers. Hypertrophic bone destruction with pseudotumoral appearance was observed in both hips. Percutaneous tissue biopsies were performed, yet histologic and bacteriologic analyses disclosed nonspecific bone fibrosis. A diagnosis of bilateral Charcot's arthropathy of the hip was made, based on the radiological findings of destructive bone changes and hypertrophic deformity, supported by a nondiagnostic investigation for infection or neoplasm and by a predisposing neurologic condition.

Charcot's arthropathy is a degenerative condition of the joints secondary to a neurologic lesion. Defective proprioception and nociception result in unopposed, repetitive mechanical trauma eventually leading to disruption, deformity, and increased bone reabsorption¹. Although most cases are associated with diabetic neuropathy, they may follow spine or peripheral nerve damage, neurosyphilis, alcoholism, and vitamin deficiency². Imaging studies typically show extensive bone reabsorption, heterotopic ossification and fibrosis, periarticular bony debris, and soft-tissue inflammation. Misdiagnosis as osteomyelitis or neoplasm is frequent. There is some debate about the best surgical treatment³. Our patient refused management of the lesions, and his neurologic condition is unchanged at 1-year followup.

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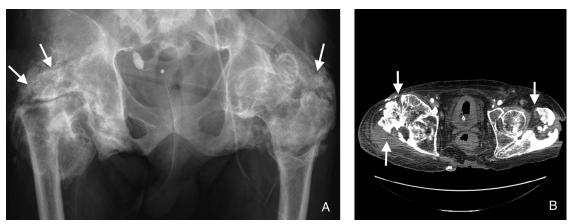


Figure 1. Plain radiograph of the pelvis (A) and computed tomography scan (B) ruled out neoplasm or chronic osteomyelitis in this patient.

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