

Bilateral Triquetrum Fracture with Specific Radiographic Signs

Özel Radyografi Bulgusu ile Bilateral Triquetrum Kırığı

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Figure 1: Bilateral triquetrum fractures on wrist radiographs, anterior-posterior and lateral view



Figure 2: “Pooping duck sign” on lateral wrist radiograph

A 44-year-old male patient presented to the emergency department with pain in both wrists because of falling. It was known that both wrists of the patient were in dorsiflexion while falling, and there was no additional injury. The Glasgow coma scale score was 15; vital values were within normal limits. The patient had bilateral wrist tenderness, pain with ulnar deviation, and edema on the dorsal side. In addition, he had pain with palpation of the left snuff box. Examinations of the ulnar and radial nerves and arteries were normal. X-rays showed a triquetrum fracture in the right hand, and a triquetrum and scaphoid fracture in the left hand. While triquetrum fractures were not apparent on anterior-posterior radiographs, they were clearly visible on both lateral radiographs (Figure 1). With a short-arm splint for the right hand and a scaphoid cast for the left hand, the patient recovered without sequelae after 6 weeks of wrist immobilization.

Triquetrum fractures are generally classified as dorsal cortex fractures and body fractures. Dorsal cortex fractures

are more common and are usually seen as avulsion fractures. They occur with trauma, especially in the form of falling with wrist dorsiflexion. (1,2). Our patient also fell with the same mechanism. To diagnose triquetrum fractures, lateral and oblique radiographs should be performed in addition to anterior-posterior radiographs. In particular, dorsal cortex fractures may not be visible on the anteroposterior radiograph, while the avulsion fragment is better seen on the lateral radiograph (3). The appearance of triquetral fractures on the lateral radiograph is called the “pooping duck sign” because of the typical shape it forms with the scaphoid and lunate bone (Figure 2) (4). In our case, although both triquetrum fractures could not be clearly seen on the anterior-posterior radiograph, they were seen more clearly with typical findings on the lateral radiograph. Triquetrum fractures are typical of carpal bone fractures, which can be seen more prominently on lateral radiographs, and knowing the specific finding on the lateral radiograph may help with the diagnosis.

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