Osteoid Osteoma of the Trapezium in a Forty-Five-Year-Old Man

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1. Introduction
Osteoid Osteoma (OO) is uncommon in the carpal bones and extremely rare in the trapezium. We report the third case of OO of the trapezium.

Case Presentation: Patient was a 45-year-old man with chronic left wrist pain for 19 months. Pain was intense at night and responsive to nonsteroidal anti-inflammatory drugs. There was a local tenderness on the trapezium. The wrist X-ray images revealed normal findings, but bone scan, computed tomographic scan, and magnetic resonance imaging indicated OO as the possible diagnosis. The patient was treated by curettage and bone graft of the trapezium. Histopathologic examination confirmed the diagnosis of OO.

Discussion: OO of the trapezium should be included in differential diagnosis list in patients with chronic wrist pain.

Keywords: Osteoid Osteoma; Trapezium; Carpal Bone

Figure 1. Anteroposterior X Ray of the Left Wrist

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3. Discussion

Generally, OO is a rare benign bone forming tumor, first described by Jaffe in 1935 (5). It usually involves long bones of the lower extremities and affects men twice as many as women (3, 4). It usually occurs in young adults (3). Pain is the most common chief complaint followed by swelling and local tenderness (2, 3). Our patient was a male in his fifth decade of life who presented with severe wrist pain and local tenderness on the involved bone. The OO was reported in upper extremity in case series. Phalanxes are the most common involved location (2, 3, 5). The OO rarely involves carpal bones, but when it does, scaphoid bone is the most frequently involved bone. It has been reported in trapezoid in few cases. Jafari et al. reported an OO of trap- ezion bone in a 42-year-old man in whom the lesion was missed for months (6). They treated the patient by simple curettage. According to their experience, OO should be considered as a possible diagnosis in a young patient who was admitted due to wrist pain (6). OO has been reported in trapezium of two patients previously (4). The first one was a 16-year-old boy and the second one was a 25-year-old man, both of them with sclerotic lesion in the trapezium (4). In our patient, the findings of the wrist radiographs were normal, which was in accordance with many previously reported cases of carpal bones OO with normal X-ray findings (6). This indicates that the diagnosis of the OO in this bone will not be straightforward.

Diagnosis of the OO in the upper extremity can be challenging. Themistocleous et al. described this challenge of diagnosis by reporting 48 patients with clinical and imaging characters of OO in the upper extremity (7). They concluded that a high index of suspicion as well as appropriate clinical and imaging modalities are essential in diagnosis of the OO located in the upper extremity (7). Similar to other carpal bone tumors, OO can be misdiagnosed as neuroma, arthritis, de Quervain’s tenosynovitis,
avascular bone necrosis, infection, and many other painful conditions (6). The diagnosis of the OO in the carpal bones usually delays and results in malpractice (6, 7). In the same manner, it took 19 months to reach the accurate diagnosis in our patient.

Even though OO is extremely rare in trapezium, this case report indicated that it should be kept in mind as a possible differential diagnosis in chronic wrist pain regardless of the patient’s age.

References