

Osteoid osteoma of the scaphoid bone: a case report

Dear Sir,

Osteoid osteoma is a benign osteoblastic tumour, first described by Jaffe and Moyer in 1935. It usually occurs between the second and third decades of life, more frequently in men (men:women, 2:1) (Themistocleous et al., 2005; Laffosse et al., 2006). It occurs less frequently in the carpal bones and is often misdiagnosed because of the varying clinical signs associated with it. The objective of this paper is to retrospectively evaluate a case of osteoid osteoma of the scaphoid bone, a condition that is often confused with other clinical entities.

This study examines a case of osteoid osteoma of the scaphoid bone, previously diagnosed as De Quervain tenosynovitis and treated surgically. The patient was a 47-year-old man, who used to work as a manager, with pain in the left anatomical snuffbox and symptoms that evolved and worsened, especially during the night. As part of a clinical trial, acetylsalicylic acid was administered, and the symptoms improved. Radiographic examination showed a suspicious area that was radiolucent

and oval (approximately 1 cm in diameter), with a central dark spot (nidus) in the scaphoid bone of the left hand (Figure 1(a)). Magnetic resonance imaging (MRI) showed reactive sclerosis around the central radiolucency, which led to a diagnostic hypothesis of osteoid osteoma of the scaphoid (Figure 1(b)). An excisional resection with curettage was performed using a prior incision on the dorsolateral surface to gain access (Figure 2(a) and (b)). Histopathological examination confirmed osteoid osteoma. Immediately after the operation, the symptoms disappeared, without recurrence or pain for 15 months.

Osteoid osteoma is a solitary benign bone tumour that usually occurs in the cortex of long bones (50% of all cases), especially in the proximal femur and tibia. In the hand, osteoid osteoma most frequently occurs in the proximal phalanx (8% of cases) and less frequently in the carpals and metacarpals (Themistocleous et al., 2005; Laffosse et al., 2006; Bednar et al., 1993). In 80% of the cases, this condition causes characteristic insidious pain in the affected area and local oedema. The pain and oedema worsen during the night and on alcohol consumption and are alleviated by intake of acetylsalicylic acid and non-steroidal anti-inflammatory

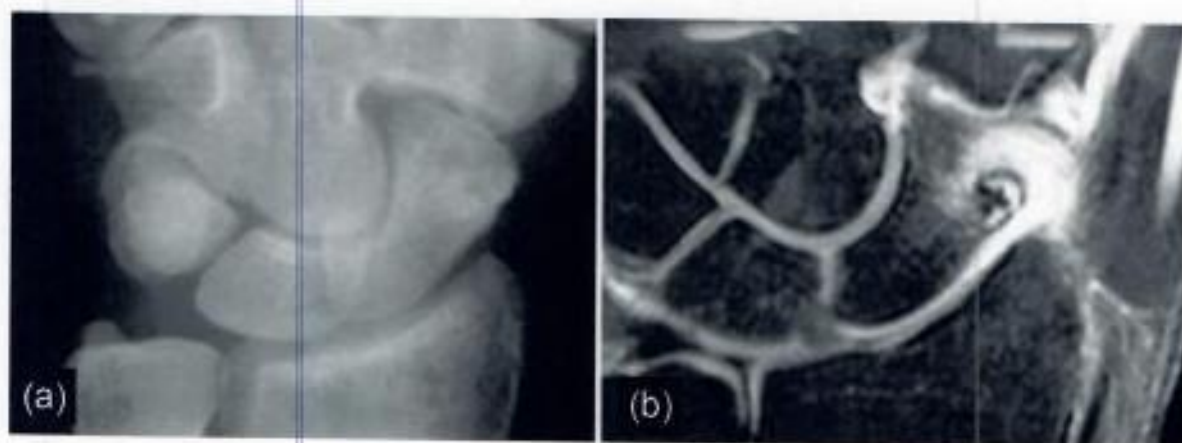


Figure 1. (a) Radiograph showing a suspicious area. (b) Magnetic resonance imaging showing reactive sclerosis around the central radiolucency (nidus).

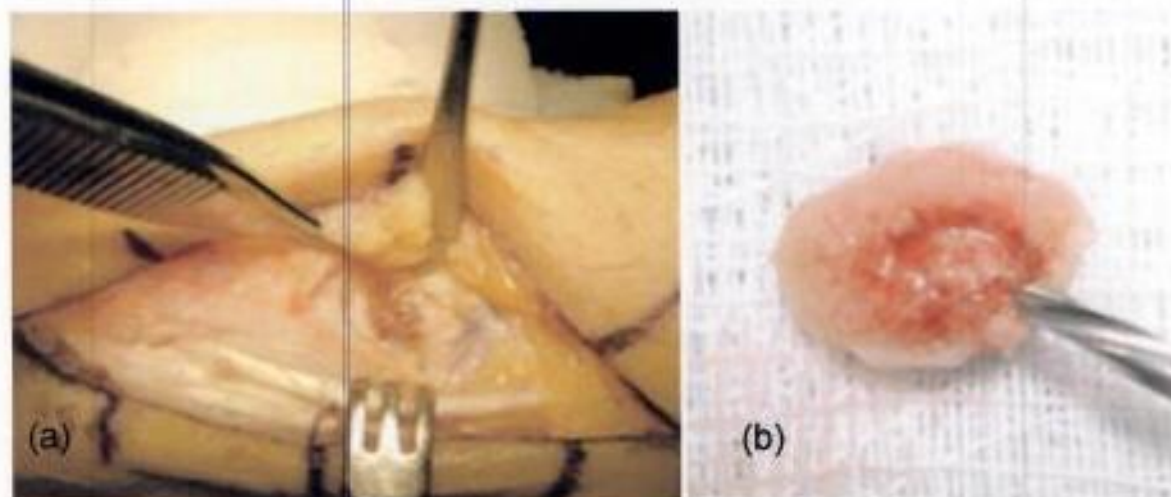


Figure 2. (a) Excisional resection with curettage. (b) Surgical specimen.

drugs (NSAIDs) [Ozalp et al., 2008]. Diagnosis of osteoid osteoma in the hand may be delayed because of the non-specific symptoms associated with it [Themistocleous et al., 2005]. MRI of the affected area usually shows an annular island (nidus), composed of small and highly vascularised tissue with different levels of peripheral rounded radiolucency [Laffosse et al., 2006; Ozalp et al., 2008]. The definitive treatment for osteoid osteoma is surgical excision with curettage, with or without a bone graft. Diagnosis of this condition in the carpus may be delayed because of the variable clinical signs that lead to erroneous diagnosis and treatment. Conditions commonly confused with osteoid osteoma include De Quervain tenosynovitis, rhizarthrosis, intersection syndrome, scaphoid fracture, and Wartenberg syndrome [Ozalp et al., 2008].

Conflict of interests

None declared.

Project approved by the Ethics in Research Committee of the Passo Fundo University RS/Brazil [Protocol 0026.0.398.000-11.].

References

- Bednar MS, McCormack RR Jr, Glasser D, Weiland AJ. Osteoid osteoma of the upper extremity. *J Hand Surg Am.* 1993; 18: 1019-25.
- Laffosse JM, Tricoire JL, Cantagrel A, Wagner A, Puget J. Osteoid osteoma of the carpal bones. Two case reports. *Joint Bone Spine.* 2006; 73: 560-3.
- Ozalp T, Yercan H, Okcu G. Osteoid osteoma of the scaphoid bone: a case report. *Firat Tıp Dergisi.* 2008; 13: 59-61.
- Themistocleous GS, Chloros GD, Mavrogenis AF, Khalidi L, Papagelopoulos PJ, Efsthopoulos DG. Unusual presentation of osteoid osteoma of the scaphoid. *Arch Orthop Trauma Surg.* 2005; 125: 482-5.

AL Severo, R. Araújo and R. Puentes
Institute of Orthopedics and
Traumatology of Passo Fundo (RS-IOT), Brazil.
Email: al.severo@terra.com.br

© The Author(s) 2012
Reprints and permissions:
sagepub.co.uk/journalsPermissions.nav
doi: 10.1177/1753193412446298 available online at <http://jhs.sagepub.com>