

Arthroscopic Treatment of Osteoid Osteoma: A Brief Review of Literature from Years 1935 to Years 2007

Saccomanni Bernardino*

Department of Orthopaedic and Trauma Surgery, Institution of Asl Bari, Italy



***Corresponding author:** Saccomanni Bernardino, Department of Orthopaedic and Trauma Surgery, Institution of Asl Bari, viale Regina Margherita, 70022, Altamura (Bari), Italy.
Tel: +39-3208007854; E-mail: bernasacco@yahoo.it



Article Type: Short Communication

Compiled date: February 24, 2020

Volume: 1

Issue: 2

Journal Name: Clinical Surgery Journal

Journal Short Name: Clin Surg J

Publisher: Infact Publications LLC

Article ID: INF1000016

Copyright: © 2020 Saccomanni Bernardino. This is an open access article distributed under the terms of the Creative Commons Attribution 4.0 International License (CC BY-4.0).



Keywords: Osteoid Osteoma; Arthroscopic Treatment; Tumour



Cite this article: Saccomanni Bernardino. Arthroscopic treatment of osteoid osteoma: a brief review of literature from years 1935 to years 2007. Clin Surg J. 2020;1(2):1–2.

Abstract

Osteoid osteoma is a benign tumour in adolescents and young adults. The clinical manifestations are generally typical nocturnal pain that prevents sleep and that is alleviated with aspirin. When the typical clinical and radiological features are present, diagnosis may arrive in connection with an unusual location. The lesion is removed arthroscopically, and histopathologic findings confirm the preoperative diagnosis of osteoid osteoma. Here, we document a brief review of literature. In this review, there are not figures and outcomes.

Introduction

Osteoid osteoma, first described by Jaffe [1] in 1935, has a predilection for long bones. Occurrence in the flat bones is unusual; involvement of the ilium is seen most frequently [2]. The lesion occurs in the second and third decades of life and it is about 2,3 times more common in men [3,4]. Since 1944, 1,258 cases of osteoid osteoma have been reported [5-16]. Of those documented, only 13 have involved the scapula. Case reports of osteoid osteoma of the scapula discuss treatment regimens that include excisional biopsy under fluoroscopy or open surgery [12]. Arthroscopic removal of osteoid osteomas has been reported for juxta-articular lesions in the talus [14,16].

Pathology

These lesions typically consist of a small yellowish to red nidus of osteoid and woven bone with inter-connected trabeculae, and a background and rim of highly vascularized fibrous connective tissue. Variable-degree sclerotic bone reaction may surround the lesion [17-21].

Imaging

Radiograph, CT, bone scintigraphy, magnetic resonance imaging, and angiography are useful to make an early and correct diagnosis. A double-ring sign on scintigraphy is a characteristic of osteoid osteoma. MRI frequently does not provide a correct diagnosis and it is not as accurate as CT that remains the technique of choice for identifying the extend of the nidus [17,19-24].

Treatment

The intra and juxta-articular osteoid osteoma can lead the clinicians to misdiagnosis. In fact depended on the localization, many initial presumptive diagnoses must be considered. Some authors have described this new treatment. Among others, we cite the work of Nourissat et al. [25] in 2007. They report 2 cases

of arthroscopic excision of the OO. Intra-articular lesions are rare, and few localizations at the elbow are reported. In 1998, Tuzuner et al. [16] presented the case of a 14-year-old with osteoid osteoma of the talar neck. They concluded that the arthroscopic an osteoid osteoma is an appropriate surgical intervention. Endoscopic treatment requires only 2 small incisions. As result, an early rehabilitation is possible and good range of motion is obtained.

Conclusion

We believe that endoscopic excision is the minimally invasive procedure of choice for treatment OOs.

References

- Jaffe HL. Osteoid osteoma of bone. *Radiology*. 1935;45:319.
- Freiberger RH, Loitman BS, Helpert M, Thompson TC. Osteoid osteoma; a report on 80 cases. *Am J Roentgenol Radium Ther Nucl Med*. 1959;82(2):194–205.
- Healey JH, Ghelman B. Osteoid osteoma: current concepts and recent advances. *Clin Orthop Relat Res*. 1986;(204):76–85.
- Pikoulas C, Mantzikopoulos G, Thanos L, Passomenos D, Dalamarinis C, Glampedaki-Dagianta K. Unusually located osteoid osteomas. *Eur J Radiol*. 1995;20:120–5.
- Chamberlain BC, Mosher JF, Levinsohn EM, Greenberg JA. Subperiosteal osteoid osteoma of the hamate: a case report. *J Hand Surg Am*. 1992;17(3):462–5.
- Contreras A, Isasi C, Silveira J, Barbadillo C, Mulero J, Andreu JL. Intraarticular osteoid osteoma. *J Rheumatol*. 2000;27(6):1560–1.
- Foucher G, Lemarechal P, Citron N, Merle M. Osteoid osteoma of the distal phalanx: a report of four cases and review of the literature. *J Hand Surg Br*. 1987;12(3):382–6.
- Heybeli N, Babacan M. Intraarticular osteoid osteoma of the distal humerus. *J Shoulder Elbow Surg*. 1997;6(3):311–3.
- Kaempffe FA. Osteoid osteoma of the coracoid process: excision by posterior approach. A case report. *Clin Orthop*. 1997;122:260–2.
- Khurana JS, Mayo-Smith W, Kattapuram SV. Subtalar arthralgia caused by juxtaarticular osteoid osteoma. *Clin Orthop*. 1990;252:205–8.
- Lafforgue P, Senbel E, Boucraut J, Horschowsky N, Golstein MM, Chrestian MA, et al. Elbow synovitis related to an intraarticular osteoid osteoma of the humerus, with immunologic and histochemical studies. *J Rheumatol*. 1992;19:633–6.
- Mosheiff R, Liebergall M, Ziv I, Amir G, Segal D. Osteoid osteoma of the scapula. A case report and review of the literature. *Clin Orthop Relat Res*. 1991;(262):129–31.
- Otsuka NY, Hastings DE, Fornasier VL. Osteoid osteoma of the elbow: a report of six cases. *J Hand Surg Am*. 1992;17(3):458–61.
- Resnick RB, Jarolem KL, Sheskiev SC, Desai P, Cisa J. Arthroscopic removal of an osteoid osteoma of the talus: a case report. *Foot Ankle Int*. 1995;16(4):212–5.
- Shaffrey CI, Moskal JT, Shaffrey ME. Osteoid osteoma of the clavicle. *J Shoulder Elbow Surg*. 1997;6(4):396–9.
- Tüzüner S, Aydin AT. Arthroscopic removal of an osteoid osteoma at the talar neck. *Arthroscopy*. 1998;14(4):405–9.
- Assoun J, Richardi G, Railhac JJ, Baunin C, Fajadet P, Giron J, et al. Osteoid osteoma: MR imaging versus CT. *Radiology*. 1994;191(1):217–23.
- Frassica FJ, Waltrip RL, Sponseller PD, Ma LD, McCarthy EF Jr. Clinicopathologic features and treatment of osteoid osteoma and osteoblastoma in children and adolescents. *Orthop Clin North Am*. 1996;27:559–74.
- Goldmann AB, Schneider R, Pavlov H. Osteoid osteoma of the femoral neck: report of 4 cases evaluated with isotopic bone scanning, CT, and MR imaging. *Radiology*. 1993;186:227–32.
- Helms CA, Hattner RS, Vogler JB 3rd. Osteoid osteoma: radionuclide diagnosis. *Radiology*. 1984;151:779–84.
- Joyce MJ, Mankin HJ. Caveat arthroscopos: extraarticular lesions of bone simulating intra-articular pathology of the knee. *J Bone J Surg Am*. 1983;65:289–92.
- Khurana JS, Mayo-Smith W, Kattapuram SV. Subtalar arthralgia caused by juxtaarticular osteoid osteoma. *Clin Orthop Relat Res*. 1990;(252):205–8.
- Yamamura S, Sato K, Sugiara H, Asano M, Takahashi M, Iwata H. Magnetic resonance imaging of inflammatory reaction in osteoid osteoma. *Arch Orthop Trauma Surg*. 1994;114:8–13.
- Winter PF, Johnson PM, Hilal SK, Feldman F. Scintigraphic detection of osteoid osteoma. *Radiology*. 1977;122:177–8.
- Nourissat G, Kakuda C, Dumontier C. Arthroscopic excision of osteoid osteoma of the elbow. *Arthroscopy*. 2007;23(7):799.