



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

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### Abstract

Osteoid osteoma is a benign tumor 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.

**Keywords:** Osteoid osteoma; Arthroscopic treatment; MRI

### Introduction

Osteoid osteoma, first described by Jaffe in 1935 [1], 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 pea 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 [19,21].

### 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 little localization at the elbow is 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.

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