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Short Communication

Osteoid osteoma

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Abstract

An osteoid osteoma is a noncancerous bone-forming tumour that has no chance of becoming cancerous. It usually causes considerable discomfort at night, which can be eased with nonsteroidal anti-inflammatory drugs. Occasionally, it goes away on its own. For osteoid osteoma-related discomfort that does not respond to conservative treatment, surgical excision is an option. This activity covers the diagnosis and treatment of osteoid osteomas of the foot and ankle, as well as the role of the interprofessional team in the treatment of patients with this disease.

Keywords: osteoid osteoma, inflammation, disease

INTRODUCTION

Jaffe originally reported osteoid osteoma in 1935, and it accounts for 10% of all benign bone tumours. It is neither locally aggressive nor has the potential to convert into a malignant tumour. The lengthy bones of the femur and tibia are frequently affected by this bone malignancy. The osteoid osteomas that affect the foot and ankle will be the subject of this chapter. The foot is affected in a smaller percentage of cases (2%-10%), with the talus being the most prevalent site of involvement. A nidus of vascular osteoid with surrounding sclerotic bone characterises an osteoid osteoma. Osteoid osteomas are divided into three categories based on their size: cortical, cancellous, and subperiosteal. Intracortical osteoid osteomas are the most common type of osteoid osteoma in long bones. The majority of osteoid osteomas in the foot are of the cancellous and subperiosteal subtypes, with minimal periosteal response. An osteoid osteoma is distinguished from an osteoblastoma by the size of the nidus [1].

Osteoid osteomas are usually tiny (less than 1.5 cm) and do not grow. They do, however, usually result in the formation of reactive bone around them. They also produce osteoid bone, a new sort of aberrant bone material. The nidus of the tumour, which is a distinct spot seen on x-rays, is formed by this osteoid bone and tumour cells. Osteoid osteomas can develop in any bone in the body, although they are most commonly found in the legs. They're also present in the palms of the hands, the tips of the fingers, and the spine. It can develop at any age, but they are most frequent between the ages of four and twenty-five. Males are three times as likely as females to be afflicted. Osteoid osteomas are a type of benign osteoma (noncancerous). They don't spread to other parts of the body (metastasize). The cause of osteoid osteomas is not known [1-3].

The pain from an osteoid osteoma is dull and painful, but it can intensify and become severe, especially at night. In most cases, the discomfort is unrelated to activity. A person may endure from the painful, uncomfortable pain of an osteoid osteoma for years before seeking medical help. Swelling may occur depending on the location of the tumour.

X-rays are useful in identifying an osteoid osteoma because they produce clear images of dense materials like bone. An x-ray of the painful area may indicate thicker bone with a small central core of reduced density, which is a hallmark of a tumour. A CT scan gives you a cross-sectional view of your bone and can help you assess the lesion. The nidus-or tumour center-is usually visible on a CT scan. To confirm the diagnosis of osteoid osteoma, a sample may be required. A biopsy is a procedure in which a sample of tumour tissue is extracted and examined under a microscope. Your doctor may numb the region with a local anaesthetic before taking a sample with a needle. A biopsy can also be done as a minor procedure. The doctor may decide not to perform a biopsy if imaging findings strongly suggest an osteoid osteoma or may request additional imaging examinations to rule out other probable bone disorders, such as an infection or a malignant tumour. To rule out an infection, certain blood tests may be utilized [2,3].

DISCUSSION

The majority of osteoid osteomas will go away on their own after a few years. Regular usage of Nonsteroidal Anti-Inflammatory Medicines (NSAIDs) such as aspirin, ibuprofen, and naproxen gives pain relief for some people. Many patients, on the other hand, can't take NSAIDs for years or don't want to wait for the tumour to go away on its own. A patient or family member may wish to contemplate surgery in these situations. Scraping or scooping out the entire tumour, particularly the nidus or central core is one surgical technique for treating an osteoid osteoma [4]. Your doctor will take great care to ensure that the tumor is completely removed; otherwise, it could return. In most individuals, one radiofrequency probe treatment is sufficient to treat the tumor. This surgery is frequently performed as an outpatient procedure, and you will be sent home with a moderate pain killer. The amount of time it takes to resume normal activities depends on the procedure and the tumor's location. In many circumstances, patients are able to return to work or school with some restrictions within a few days. The majority of patients experience symptom relief within 24 hours of radiofrequency ablation [4].

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