



# Rheumatoid nodule mimicking an olecranon bursitis as the primary manifestation of rheumatoid arthritis

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## ABSTRACT

Olecranon bursitis is a relatively common condition, being most of the cases idiopathic. Less commonly it is caused by infection, by a systemic inflammatory process or by a crystal-deposition disease such as gout or pseudogout. We present a case that was referred as olecranon bursitis, in which the diagnose of rheumatoid nodule was established after histological study of the resected tissue.

## KEYWORDS

Reumatoid arthritis, olecranon, bursitis.

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## CASE REPORT

We present herein a 45 year-old caucasian male with no relevant past medical history who consulted for presenting a lump at the posterior aspect of the right elbow, not painful and with slight inflammatory signs, referred with the clinical orientation of olecranon bursitis. He explained to have it for the previous four years, and that swelling began some months before.

The study by plain radiographs revealed soft tissue swelling superficial to the olecranon (Figure 1A). Computed tomography depicted the presence of a solid mass producing irregular bone erosion at the tip of the olecranon (Figure 1B), whereas the study by magnetic resonance imaging showed an heterogeneous tumor of intermediate signal on T1-weighted with internal septations that featured radiological aggressivity (Figure 1C).

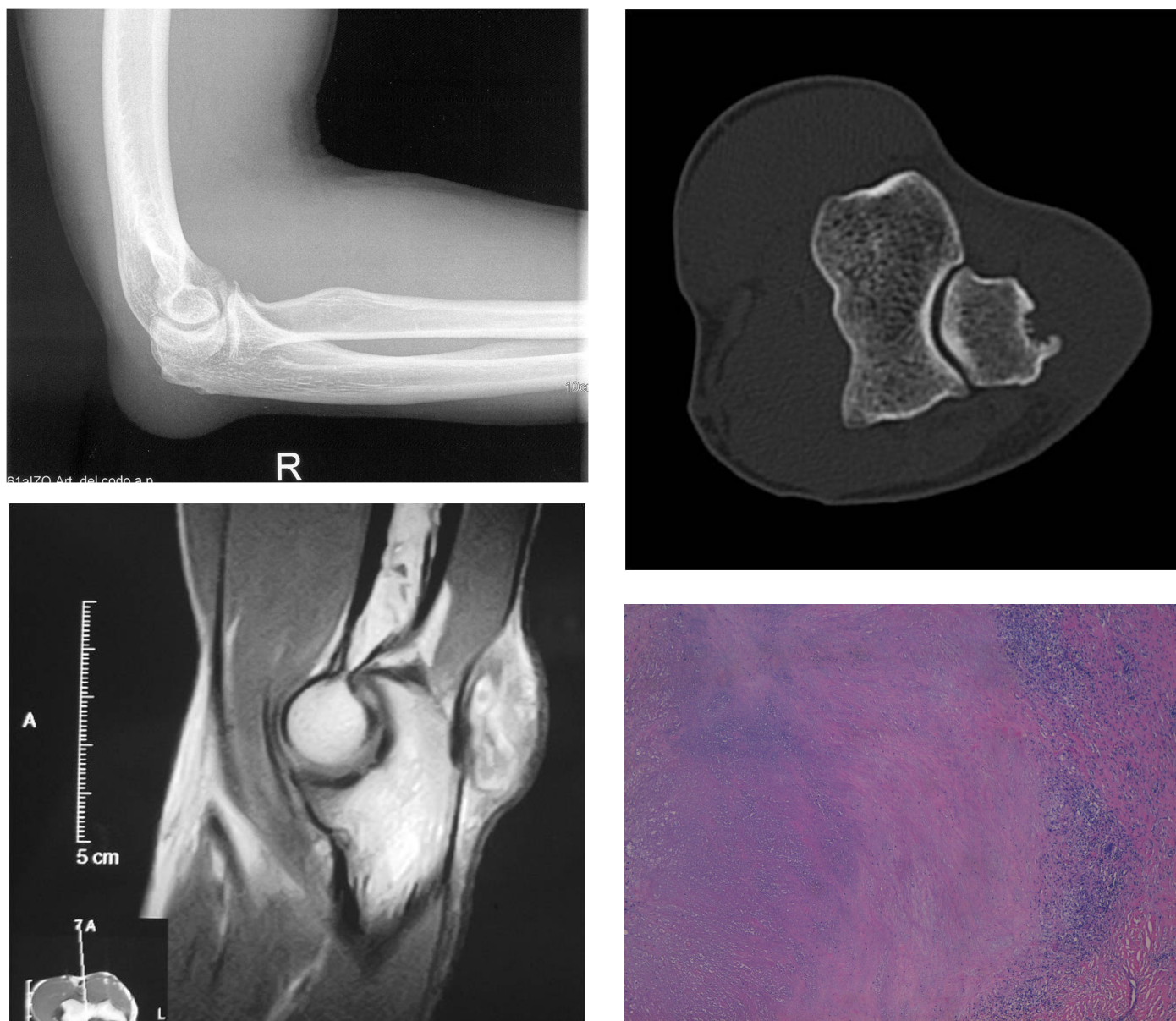


Fig. 1. Fig. 1.A: Up left, plain radiographs of the right elbow; Fig. 1.B: Up right, Computerized Tomography; Fig. 1.C: Down left, MR; Fig. 1.D: Down right. Histological study with hematoxylin and eosin stain.

Surgical excision was performed and the specimen was sent for anatomopathological analysis in order to rule out infection vs chronic inflammatory process vs tumour.

The histological examination showed the presence of granuloma with vast areas of fibrinoid necrosis surrounded by a palisade of elongated histiocytes, and a mixed infiltrate of predominant multinucleated giant cells (Figure 1D). All this findings supported the diagnosis of rheumatoid nodule.

The patient was subsequently followed up for one year and did not show other concomitant signs or symptoms of disease.

The subcutaneous nodule did not reappear. He is now under clinical follow-up.

Rheumatoid arthritis can affect any joint, but it is usually found in metacarpophalangeal, proximal interphalangeal and metatarsophalangeal joints, as well as in the wrists and knee [1]. Bursal or tendon affection are common, but specially at early stages of the disease, and subcutaneous nodules are found in up to 20% of the patients [2]. By presenting this case, we pretend to warn the orthopedic surgeons that a rheumatoid nodule can mimic an olecranon bursitis.

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