



Clinical rheumatology in images

## Painful shoulder in ulcerative colitis

### Omalgia en paciente con colitis ulcerosa

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#### Introduction

Proximal humeral osteonecrosis is an uncommon disease, associated with traumatism (15%-30%), corticosteroids<sup>1</sup> (5%), Caisson or Gaucher disease, sickle cell disease, alcoholism (6%-39%), lupus, or renal failure<sup>2</sup> and is exceptional after taking sulfasalazine. Our objective is to present a case where this drug was the only demonstrable aetiological agent of the disease, as well as the final surgical treatment employed to resolve the omalgia.

#### Case report

The patient was a 40-year-old male with a history of ulcerative colitis, with late diagnosis after 2 years' evolution. He had been treated with sulfasalazine for 2 years after diagnosis, and referred left shoulder pain of over 8 months' evolution, abduction limited to 70° and great rotational pain. He did not refer any previous traumatism, drinking habit or taking corticosteroids. The ESR, CRP and rheumatoid factor values were within normal limits. X-rays showed cephalic patchy condensation (Figure 1). Subchondral collapse, half-moon sign, and subchondral void signs could be observed through MRI, all compatible with the diagnosis of osteonecrosis of the proximal humerus (Crues stage III<sup>3</sup>) (Figure 2). A proximal humeral hyperintensity was clearly observed in the scintigraphy scan (Figure 3).

#### Diagnosis

Stage III Crues osteonecrosis of the proximal humerus in a patient treated with sulfasalazine.

#### Evolution

Due to the absence of improvement with non-steroidal anti-inflammatory treatment, surgery through proximal humeral resurfacing arthroplasty was considered; following surgery, the pain stopped after 3 months and there was 100° abduction (Figure 4 and Figure 5).

#### Discussion

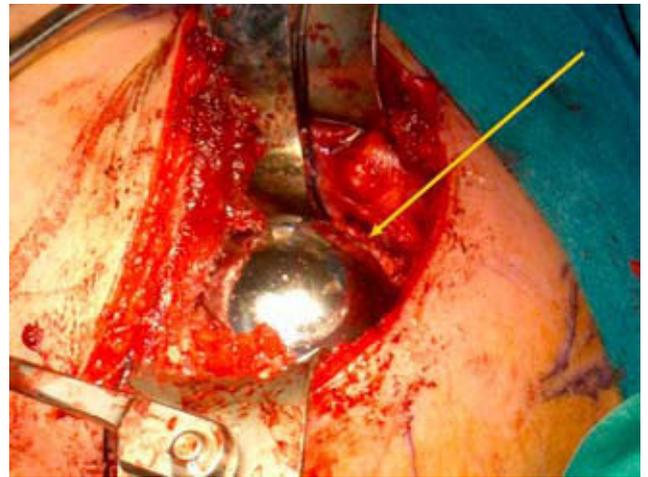
Osteonecrosis in patients with ulcerative colitis has principally been linked to the use of steroids<sup>4</sup> or cyclosporine,<sup>5</sup> with a link to sulfasalazine being exceptional. There are known negative side-effects caused by this molecule, such as hypersensitivity, colitis, pancreatitis, pericarditis, and nephritis. However, there is only 1 reference in medical literature (Lau<sup>6</sup>) that proves the risk of producing necrosis in the bone marrow associated with a hypersensitive reaction with lymphadenitis, hepatitis, and multiple organ failure in a patient with rheumatoid arthritis and with a possible DRESS syndrome<sup>7</sup> (drug rash with eosinophilia and systemic symptoms). In our case, the result was osteonecrosis, although fortunately the rest of the symptoms were not present; this was the reason for ceasing sulfasalazine therapy and treating the omalgia. Uribe<sup>8</sup> recommends this arthroplasty, which decreases the VAS from 7.5 to 1.6 points ( $P<.001$ ) and improves anterior flexion (from 94° to 142°,  $P<.001$ ). Raiss<sup>9</sup> claims that resurfacing arthroplasty also improves the Constant test from 20 to 61 points ( $P<.007$ ) in post-dislocation stiffness and in syringomyelic neuropathic shoulder according to Crowther.<sup>10</sup> In the opinion of Fink,<sup>11</sup> resurfacing arthroplasty improves results in the Constant

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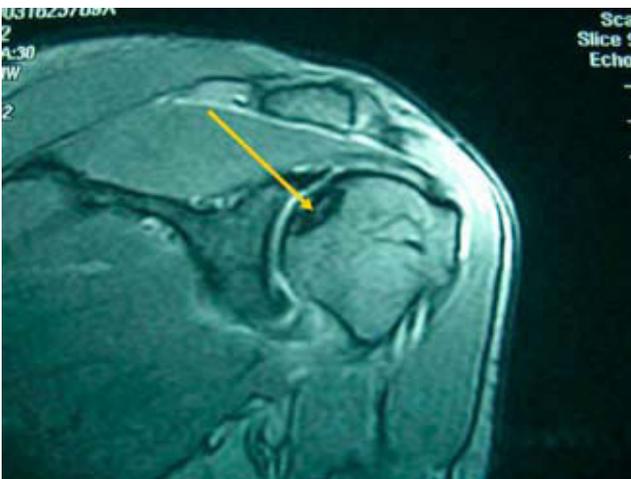
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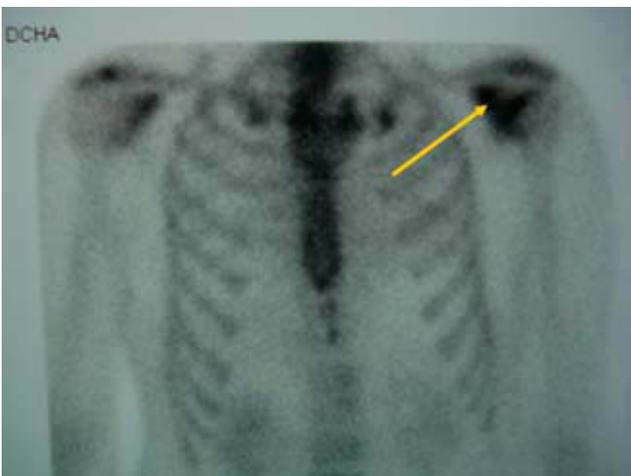
**Figure 1.** X-Ray. Area of increased intensity in the humeral head suggestive of osteonecrosis.



**Figure 4.** Intraoperative image. Placement of head component at the level of anatomical neck.



**Figure 2.** MRI. Subchondral collapse, half-moon sign, and subchondral void compatible with osteonecrosis of the proximal humerus (Cruess stage III).



**Figure 3.** Proximal humeral hyperintensity.



**Figure 5.** Postoperative X-ray image.

In conclusion, in cases of proximal humeral osteonecrosis caused by sulfasalazine, as in other idiopathic cases, resurfacing arthroplasty can be a therapeutic alternative because it improves pain and functional results in these patients.

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test from 20.25±9.06 points to 46.62±14.05 points within 3 months; however, according to Alund,<sup>12</sup> the risk of glenoid erosion in these patients is of 2.6±1.7 points.

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