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Calcific tendinitis: An infrequent and misdiagnosed cause of acute wrist pain — A case report

N Hulse, A Kumar

Department of Trauma and Orthopaedics, Manchester Royal Infirmary, Manchester, UK

Introduction

Acute calcific tendinitis in the shoulder joint is a well-known clinical condition. This condition has been reported around the wrist joint and in the hand with the tendon of the flexor carpi ulnaris being the commonest site¹. We present a case of acute calcific tendinitis of the flexor carpi ulnaris tendon at the wrist joint.

Case report

A 68-year old retired right-handed teacher presented to the accident and emergency department with sudden onset of pain, swelling and redness in the left wrist. There was no previous history of wrist pain or involvement of any other joint. There was no history trauma or any significant medical problems in past. On physical examination, the patient was pyrexial with a temperature of 37.5 degrees. The left wrist was swollen, erythematous and warm. There was local tenderness mainly around the ulnar side of the wrist. The wrist movements were painful and restricted. The radiographs of the wrist joint did not show any obvious bone or joint pathology. Clinically, the patient was suspected to have septic arthritis of the wrist joint.

Radiographs of the wrist showed calcific deposit on the volar aspect of the wrist near the pisiform bone (Fig 1). Blood investigations showed mildly elevated inflammatory markers with a WBC count of 11.5 X 10°/L, ESR 36 and CRP 48mg/L. On the basis of radiographic findings and blood results, the patient was treated for calcific tendinitis of the flexor carpi ulnaris tendon with a wrist splint and anti-inflammatory agents. The patient responded to the treatment with complete resolution of symptoms in 48 hours. At two months follow up, the patient was completely asymptomatic.

Discussion

The patient usually presents with acute symptoms of pain, swelling, restricted movements around the affected joint

N Hulse, FRCS, Clinical Research Fellow Orthopaedics A Kumar, MS(Orth), FRCS, Specialist Orthopaedic Registrar Department of Trauma and Orthopaedics, Manchester Royal Infirmary, Oxford Road, Manchester, UK

Mr A Kumar, FRCS, 170, Woodhouse Lane, Sale, Cheshire, UK, M33 4LN; E-mail- arun28@aol.com ⊠





Fig. 1. (a, b) Radiograph of the left wrist AP & Lat views showing calcific deposits near the pisiform.

and may be apyrexial or run a low-grade temperature. This condition can be easily confused with septic arthritis ^{2,3}, which is more likely to happen if calcific tendinitis occurs at an uncommon site leading to unnecessary investigations, treatment and delay in diagnosis ⁴. Unlike in septic arthritis inflammatory markers may be normal or only slightly elevated. Radiologically, calcific tendinitis appears as amorphous deposits with irregular margins and absent bony trabeculations, which can be mistaken for an avulsion fracture, sesamoid bone, bony ossicle, gout and arthritis.

The natural history of calcific tendinitis is that of a selflimited condition. Patients are usually treated symptomatically although aspiration of deposits and local injection of anaesthetic with or without steroid are other suggested remedies. Calcific tendinitis should be one of the differential diagnoses in patients presenting with acute symptoms around the wrist joint.

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