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# **Case Report of Monoarticular Rheumatoid Arthritis**

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### **Abstract**

**Objective:** Monoarticular presentation of rheumatoid arthritis is infrequent and has been previously reported to involve large joints such as the hip and knee joints. Here we report a case presenting with monoarticular rheumatoid arthritis.

Case: 44-year-old male presented to our department with pain and swelling of his right knee. His blood tests showed elevated inflammatory markers Radiograph of the knee joint revealed joint effusion, symmetrical reduction in joint space noted with mild surface irregularity. Osteopenia was noted. Arthroscopic synovial biopsy was done and histopathological examination was confirmative of rheumatoid arthritis. Patient was started on DMARDS and showed dramatic improvement.

**Conclusion:** Rheumatoid Arthritis should be assumed in patients with tenacious pain and swelling and with deprived retort to treatment and surgical approach (arthroscopic debridement) should be presented as it is a useful tool for both confirming the diagnosis and as a treatment for the patient.

Keywords: Rheumatoid arthritis, Seronegative, Monoarticular

# INTRODUCTION

Rheumatoid arthritis (RA) is a common symmetrical chronic inflammatory arthritis with varied clinical presentation [1]. An insidious onset of pain with symmetric swelling of small joints of the hand is the most frequent finding. Monoarticular presentation of RA is infrequent and it usually occurs in the hip and knee joint progressing to polyarticular presentation in 3-5years [2]. Although the recent 2010 ACR/EULAR criteria are helpful in making an earlier diagnosis of RA, they do not include monoarticular RA because certain patients do not meet the burden of a score of 26. We report a case of 44 year's old female with monoarticular RA of the right knee joint [3].

#### Case details

A 44 years old female non hypertensive, non-diabetic, came with complaints of progressive pain, swelling and restriction of movements of her right knee joint since 6 months. History of morning stiffness present lasting for several hours. History of on and off

episodes of fever with aggravated joint pain. No history of trauma or other joint involvement. Physical examination showed swelling and tenderness of right knee joint without skin changes.

## 2010 ACR/EULAR score

- One Large Joint: 0 points
- Elevated ESR & CRP:I point
- High positive RF or anti-CCP:3 points
- Duration 6 months: 1 point
- Total score : 5 points

## **Investigations & treatment**

Total leukocyte count was recorded as 5000 cell/cumm, Hb % was 9gm/dl. Uric acid was 2.9. ESR was found to be 85 mm/1hour. CRP level was 96

µg/ml, RA factor 20 IU/ml (positive). Anti-CCP 49.90 was U/ml (10-fold raise). Microscopy of the synovial fluid to detect crystals was negative, synovial fluid culture was negative. Radiograph of the knee joint revealed joint effusion, symmetrical reduction in joint space noted with mild surface irregularity. Osteopenia was noted

#### **Treatment**

Patient was treated with tab prednisolone 10 mg tapered to 2.5 mg, tab. hydroxychloroquine 200 mg, tab. methotrexate 7.5 mg, tab folic acid 5 mg. tab indomethacin 75 mg. symptomatic improvement was seen following DMARD treatment.

### **Discussion**

Untreated RA can result in both short- and long-term complications with an increase in mortality and morbidity, Over the last decade, studies have continually supported the notion Of "the therapeutic window of opportunity," where the current treatment strategy is to initiate early aggressive therapy followed by escalation of therapy guided by disease activity measures aiming to achieve clinical remission and the prevention of radiographic damage and joint deformity Often, serology including RF and anti-CCP are not considered [4]. The first question during the evaluation process is to determine the duration of symptoms and establish whether it is acute or chronic monoarthritis [5]. If symptoms persist for more than 6 weeks, the condition is considered to be chronic. A thorough history and physical examination supported by imaging and laboratory testing can differentiate inflammatory between and non-inflammatory monoarthritis [6]. The possible etiologies of chronic inflammatory monoarthritis include indolent infections such as tuberculosis, fungal and rare parasitic infections, crystal arthropathies, autoimmune diseases such as arthritis due to seronegative spondyloarthritis and, to a lesser extent, RAs [7].

#### Conclusion

In clinical practice there is a low clinical index of suspicion for RA in patients presenting with chronic

monoarthritis and other common etiologies are considered. If symptoms persists for more than 6 weeks then often serology including RF and anti-CCP are not considered. This case suggest the use of RF and anti-CCP to be considered even in case Of monoarthritis for early initiation of treatment to prevent complications.

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