CRCP Case Reports in Clinical Practice

Case Report

Journal Homepage: http://crcp.tums.ac.ir

Treatment of Reactive Arthritis: A Case Report

Behshad Pazooki*, Shahrzad Shojaie

Department of Internal Medicine, Imam Khomeini Hospital Complex, Tehran University of Medical Sciences, Tehran, Iran.

Use your device to scan and read the article online

Citation: Pazooki B, Shojaie Sh. Treatment of Reactive Arthritis: A Case Report. Case Reports in Clinical Practice . 2020; 5(4):121-123.

Running Title: Treatment of Reactive Arthritis

Article info:

Received: 18 October 2020

Revised: 08 November 2020

Accepted: 08 November 2020

Keywords:

Reactive arthritis; Non-steroidal anti-inflammatory drugs (NSAIDs)

ABSTRACT

Reactive arthritis is clinically defined as inflammatory aseptic arthritis which develops shortly after an extra-articular infection. The classic triad of conjunctivitis, urethritis, and arthritis is found in a minority of patients. Patiepresent with an asymmetric mono- or oligoarthritis that predominantly affect lower limbs. Here, we present a case of reactive arthritis with inadequate primary response to Nonsteroidants Usually l Non-SteroidalAnti-inflammatory Drugs (NSAIDs).

Introduction

Reactive arthritis is clinically defined as inflammatory aseptic arthritis which develops shortly after an extra-articular infection. The classic triad of conjunctivitis, urethritis, and arthritis is found in a minority of patients [1]. Patients usually present with asymmetric mono- or oligoarthritis that predominantly affects lower limbs [2]. Here, we present a case of reactive arthritis with inadequate response to nonsteroidal anti-inflammatory drugs (NSAIDs).

Case Presentation

A 26-year-old man presented to our emergency department with complaints of conjunctivitis, fever, myalgia, and joint pain. His symptoms appeared two weeks before admission with dysuria, constipation, and followed by conjunctivitis. He was initially treated with topical agents for conjunctivitis, lactulose for constipation, and ciprofloxacin (250 mg, BD) for Urinary Tract Infection (UTI). Dysuria and constipation were resolved with treatment, but conjunctivitis did not improve. In the following days, fever, myalgia, and joint pain were added to his symptoms. He was com-

*** Corresponding Author:**

Behshad Pazooki, MD.

Address: *Department of Internal Medicine, Imam Khomeini Hospital Complex, Tehran University of Medical Sciences, Tehran, Iran.*

E-mail: *behshad.pazooki@yahoo.com*

plaining of pain, especially in his lower back and legs. His medical history was otherwise unremarkable.

Physical examination revealed swelling, mild to moderate tenderness, and restricted mobility in his ankles and knees. The remaining examinations were unremarkable. Ultrasonography showed no abnormal finding in abdominal and pelvic areas. Laboratory blood tests showed elevated White Blood Cells (WBC) count (19300/mm^3). Erythrocytes Sedimentation Rate (ESR) was 104 mm/h, and C-reactive protein (CRP) was 79 mg/dL. The Human Leukocyte Antigen (HLA)-B27 test was positive. Viral markers and Brucella antibody tests were negative. Rheumatologic blood tests (ANA, RF, Anti-CCP, Anti-ds DNA, Anti-Ro, and Anti-La) were within the normal range.

With a diagnosis of reactive arthritis, he was treated with naproxen 500 mg every 12 hours. After two weeks, his symptoms did not recover, so we changed the treatment regimen to high-dose indomethacin (75 mg, BD) and sulfasalazine (1 g, BD). After that, the patient improved significantly and he was discharged with an outpatient regimen of sulfasalazine, indomethacin, and pantoprazole. Two months later, all of his symptoms were resolved, and therefore, we discontinued medications.

Discussion

Reactive arthritis is a type of inflammatory arthritis with acute onset. It is commonly considered a form of spondyloarthritis. The pathogenesis of inflammation in joints is not fully understood yet. Some believe that the structural similarity of the HLA-B27 and certain microbial antigens may trigger autoimmune responses. The incidence of reactive arthritis is higher among individuals carrying HLA-B27 [2]. In a study by Leirisalo et al. [3], patients with reactive arthritis who were HLA-B27 positive were found to have a more severe acute disease and more chronic symptoms. Similarly, the case we presented in this study was HLA-B27 positive.

Symptomatic relief is the main treatment goal in patients with reactive arthritis. In a majority of patients, the disease resolves spontaneously without any complication within a few weeks after the onset of symptoms [2].

NSAIDs (e.g., naproxen, diclofenac, or indomethacin) are the mainstay of treatment. To effectively control pain and inflammation, anti-inflammatory doses of NSAIDs are given as the initial treatment for at least two weeks. However, there is no evidence that NSAIDs affect the course of the disease [4, 5]. In clinical practice, individual responses to NSAIDs trial therapy vary significantly. Although the majority of patients respond well to treatment, some are resistant to NSAIDs and need more advanced treatment strategies. In our case, the patient did not respond adequately to an anti-inflammatory dose of naproxen (500 mg, BD); therefore, we initiated another NSAID trial (indomethacin, 75 mg, BD) and sulfasalazine (1 g, BD) which is a disease-modifying antirheumatic drug.

The use of sulfasalazine is suggested in patients with reactive arthritis resistant to NSAIDs or with chronic reactive arthritis (i.e., lasting longer than six months) [6]. Two randomized double-blind placebo-controlled trials showed that sulfasalazine is well tolerated and moderately effective in patients with refractory chronic reactive arthritis [7, 8]. However, there is no study of the efficacy of sulfasalazine in the setting of reactive arthritis. Our patient responded very well to combination therapy with indomethacin and sulfasalazine, and all of his symptoms were resolved about two months later.

Ethical Considerations

Compliance with ethical guidelines

All ethical principles were considered in this article.

Funding

This research did not receive any grant from funding agencies in the public, commercial, or non-profit sectors.

Conflict of interest

The authors declared no conflict of interest.

Acknowledgements

The authors would like to acknowledge the personnel who work in the general ward and laboratory of Imam Khomeini Hospital Complex, Tehran University of Medical Sciences.

References

[1] Carter JD. Reactive arthritis: Defined etiologies, emerging pathophysiology, and unresolved treatment. Infectious Disease Clinics of North America. 2006; 20(4):827-47. [DOI:10.1016/j.idc.2006.09.004] [PMID]

[2] Carter JD, Hudson AP. Reactive arthritis: Clinical aspects and medical management. Rheumatic Diseases Clinics of North America. 2009; 35(1):21-44. [DOI:10.1016/j.rdc.2009.03.010] [PMID]

[3] Leirisalo M, Skylv G, Kousa M, Voipio-Pulkki LM, Suoranta H, Nissila M, et al. Followup study on patients with Reiter's disease and reac-

tive arthritis, with special reference to HLA-B27. Arthritis and Rheumatism. 1982; 25(3):249-59. [DOI:10.1002/art.1780250302] [PMID]

[4] Lassus A. A comparative pilot study of azapropazone and indomethacin in the treatment of psoriatic arthritis and Reiter's disease. Current Medical Research and Opinion. 1976; 4(1):65-9. [DOI:10.1185/03007997609109283] [PMID]

[5] Juvakoski T, Lassus A. A double-blind cross-over evaluation of ketoprofen and indomethacin in Reiter's disease. Scandinavian Journal of Rheumatology. 1982; 11(2):106-8. [DOI:10.3109/03009748209098171] [PMID]

[6] Carter JD. Treating reactive arthritis: Insights for the clinician. Therapeutic Advances in Musculoskeletal Disease. 2010; 2(1):45-54. [DOI:10.1177/1759720X09357508] [PMID] [PMCID]

[7] Clegg DO, Reda DJ, Weisman MH, Cush JJ, Vasey FB, Schumacher HR, et al. Comparison of sulfasalazine and placebo in the treatment of reactive arthritis (Reiter's syndrome). A Department of Veterans Affairs Cooperative Study. Arthritis and Rheumatism. 1996; 39(12):2021-7. [DOI:10.1002/art.1780391211]

[8] Egsmose C, Hansen TM, Andersen LS, Beier JM, Christensen L, Ejstrup L, et al. Limited effect of sulphasalazine treatment in reactive arthritis: A randomised double blind placebo controlled trial. Annals of the Rheumatic Diseases. 1997; 56(1):32-6. [DOI:10.1136/ard.56.1.32] [PMID] [PMCID]