Volume : 5 | Issue : 4 | April 2016 • ISSN No 2277 - 8179 | IF : 3.508 | IC Value : 69.48

Research Paper

# Reiters Syndrome-Classical Presentation (Case Report)

Medical Science

**KEYWORDS :** Reiters syndrome, Urethritis, conjunctivitis, HLA-B27. Polyarthritis.

**Dr Madhuri Janbandhu** Director-Darshil hospital, Veer waman rao chowk yavatmal

**Dr Arun Janbandhu** Director-Darshil hospital, Veer waman rao chowk yavatmal

## ABSTRACT

*Reiter syndrome is a systemic disorder, originally defined as a triad of arthritis, urethritis and conjunctivitis. This symptoms complex usually follows an episode of either urethritis or dysentery. Skin and mucosal involvement is observed in about 10% of the cases. We present a case of Reiter's syndrome in a 22 year young man who developed the Polyarticular joint involvement(both knees, left ankle and both elbow ) along with keratitis and urethritis. Patient has history of dysentery 3 weeks prior to joint involvement.We are presenting this case because classical presentation is very rare.*

**Introduction**

In 1916, Hans Reiter described the classic triad of arthritis, nongonococcal urethritis, and conjunctivitis (Reiters syndrome, RS) in a Prussian soldier with diarrhea, during the first world war[1,2]. More recently, RS has been defined as a peripheral arthritis lasting longer than 1 month, associated with urethritis, cervicitis, or diarrhea2. Symptoms generally appear within 1–3 weeks but can range from 4–35 days from onset of inciting episode of urethritis/ cervicitis or diarrhea3. Signs and symptoms usually remit within 6 months. However, a significant percentage of patients have recurrent episodes of arthritis (15–50%), and some patients develop chronic arthritis (15–30%)3. Cardiac signs such as aortic regurgitation caused by inflammation of aortic wall and valve are rare. Other rare manifestations are central or peripheral nervous system lesions and pleuropulmonary infiltrates [2,4].

RS is triggered by bacterial infection that enters via mucosal surfaces usually, (but not always) associated with human leukocyte antigen (HLA)- B271,2,4. Nongonococcal venereal (most often *Chlamydia*) and infectious diarrhea usually precede RS.

The syndrome was the first rheumatologic disease noted in association with Human Immunodeficiency Virus2. RS is most common in individuals aged between 15–35 years; and it is rarely seen in children1,2,5. The male-to-female post venereal ratio is 5–10:1,

**Case Report**

**A 22**-year old male who was reffered from orthopedic surgeon for fever and arthralgia in both knee joint since 5 days.On enquring he told that he suffered dysentery 3 weeks prior to involvement of joint. The joint pains involved both elbow joint ,left ankle,and both knee joints(both swollen) There was no urethral discharge, hematuria or genital ulcer but history of burning in micturation was present. There was associated redness of both eyes but no chest symptoms. He had not been transfused with blood in the past and there was no history of multiple sexual partners.

Physical examination revealed a young male who was not pale but febrile to touch and was dehydrated. He had a swollen, tender both knee and tender both elbow n left ankle.. Other joints were normal. Apart from tachycardia of 114 beats / min, other systemic examinations were normal. Cardiac auscultation was normal.

Laboratory investigation revealed a haematocrit of 45% and a total white cell count of 15,800/mm3, neutrophils 78% and 15% lymphocytes. The erythrocyte sedimentation rate was 45 mm first hour (Winthrobe method). Urinalysis revealed 5to 6 pus cells. Rheumatoid factor and retroviral screening (HIV 1 and 2) ,HBsAg were negative.Sickling was negative.ANA negative.CRP was positive.HLA-B27 positive.Anti CCP antibodies negative.

X-Ray of both knee,both elbow was normal.

He was rehydrated with intravenous fluids and placed on Ibuprofen, intravenous pipracelline+tazobactum. The patient clinical improvement was good and Rheumatologists opinion was taken.He started him on tab sulfasalazine and analgesic.Pt is now stable.

**Discussion**

RS is reported most frequently among whites, occurrence appears to be related to HLA-B27 prevalence in the population.[2]

The age and gender of this patient are in keeping with the pattern among other population, that is, male preponderance and age range of between 15–35 years. The patient presented with urethritis, arthritis and conjunctivitis about 3 weeks after the onset of dysentery. This is in agreement with documentation that most cases of RS usually follow an infection (1–3 weeks after) 1,2,3,4,5. The classic triad of RS was present in this patient. It has been positive in only one third of patients.The arthritis was polyarticular and mainly involved the joints of the lower extremities.12 Furthermore, the pts developed keratitis and opthalmologists opinion was taken and he managed the case conservatively. These are all typical findings in RS.

Features suggestive of cardiovascular, nervous and pulmonary involvement were not present in the patient. Dermatologic manifestations as balanitis circinata, keratoderma, nail changes (onycholysis, ridging and hyperkeratosis) and superficial oral ulcers were absent in the case presented. These are known to be rare in RS[1,2].

Generally, the diagnosis of RS is clinical; there are no definite diagnostic laboratory test or radiographic findings. Elevated ESR and acute phase reactants are usually found in cases of RS commonly. Although anemia is commonly found in RS, the haemaocrit of 45% in our patient must have been due to the effects of dehydration. Immunohistochemistry, polymerase chain reaction and molecular hybridization may be useful in further assessment[1,2].HLA_B27 and Anti CCP antibodies are present 70% of patients.

The patient was managed conservatively with ibuprofen and antibiotics. These are the recommended medications in the management of RS [1,2]. Other drugs that may be used are sulfasalazine, methotrexate, Azathioprine, and intra-articular steroid injection. 2,3,6

Long term follow - up studies suggest that some joint symptoms persist in 30 to 60% of patients with RS2. Recurrences of the acute syndrome are common, and as many as 25% cases evolve into chronic illness leading to disability which may make the patient unable to work or forced to change occupation2,4,6

Volume : 5 | Issue : 4 | April 2016 • ISSN No 2277 - 8179 | IF : 3.508 | IC Value : 69.48

Diagnosing Reiter's disease can be difficult because of the great variation of the clinical features and because the classical triad is present in only one third of the patient.In this patient we have typical presentation of classical triad following dysentry.HLA_ B27 was positive and responded well to analgesic and sulfasalazine.

## References


1. Tauros JD, Lipsky PE. Ankylosing Spondylitis, Reactive arthritis and Undifferentiated Spondiloarthropathy. In: Braunwald E, Isselbacher KJ, Petersdorf RG, Wilson JD, Martin JB, Fauci AS, editors. Harrison's Principles of Internal Medicine. 18th Edition. Publishers - McGraw - Hill Book Company; 2012. pp. 2778–2780. Chapter 325
2. Thomas Scoggins MD, Igor Boyarsky DO. Reiter's syndrome. [November 02, 2003]. < http://www.emedicine.com/cgibin/foxweb.exe/screen@d:/em/ga?book=emerg&authorid=9354&topicid=498>: < http://www.emedicine.com/cgi-bin/foxweb.exe/screen@d:/em/ga?book=emerg&authorid=9354&topicid=498>. Available at eMedicine.com.
3. Amor B. Reiter's syndrome. Diagnosis and clinical features. Rheum Dis Clin North Am. 1998 Nov;24(4):677–695. vii. [PubMed]
4. Fan PT, Yu DTY. Reiter's syndrome. In: Rudd Kelley., editor. Textbook of Rheumatology. 9th Edition. WB Saunders; 2010. pp. 1221_ 1223.
5. Cuttica RJ, Scheines EJ, Garay SM, et al. Juvenile onset Reiter's syndrome. A retrospective study of 26 patients. Clin Exp Rheumatol. 1992 May–Jun;10(3):285–288.[PubMed]
6. Hughes RA, Keat AC. Reiter's syndrome and reactive arthritis: a current view. Semin Arthritis Rheum. 1994 Dec;24(3):190–210.PubMed