

Reiter's Syndrome

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The term Reiter's syndrome (RS) describes a triad of inflammatory lesions occurring in the synovium, conjunctiva and urethra. The condition is said to be extremely rare in children (1). To the best of our knowledge, RS in children has not been described from India so far. This communication describes a child with this condition recently managed by us.

Case Report

An 8-year-old male child presented with history of fever associated with watering and redness of eyes for seven days, discharge per urethra for six days and pain and swelling of right knee joint and right 1st metatarsophalangeal joint for 2 days. There was no history of rash or symptoms related to the gastrointestinal tract.

On examination his vital signs were stable. He had marked conjunctival congestion and a whitish discharge per urethrum. His metatarsophalangeal joint showed redness, swelling and marked tenderness. The systemic examination was normal. Hemo-

globin concentration was 8 g/dl, erythrocyte sedimentation rate was 52 mm in first hour and the renal functions were normal. Urine examination showed plenty of pus cells per high power field; however, urine culture was sterile. Urethral swab for chlamydia and gonococcus was negative. X-rays of metatarsophalangeal joints as well as right knee showed soft tissue swelling but no bony involvement. Conjunctival swab did not reveal any micro-organisms on Gram staining and culture was sterile. He had positive C reactive protein, ASO titre less than 200 units and negative rheumatoid factor. HLA B 27 antigen was negative. On 5th day of admission, he had involvement of left ankle joint. He was started on aspirin 100 mg per kg per day, but the relief in symptoms was marginal even after 3 weeks of therapy. At this time aspirin was tapered off and was substituted with naproxen 12 mg/kg/day. He was also given a 2 weeks course of oral erythromycin. He showed gradual improvement and the joint symptoms disappeared by 2 months. All drugs were discontinued by 6 months. At follow up after one year he had a mild recurrence of joint symptoms which responded to naproxen again.

Discussion

Our patient had the classical triad of Reiter's syndrome; arthritis, urethritis and conjunctivitis (2). Majority of RS have been reported to occur between the ages of 16 and 35 years (3). In a large series of RS it was found that only 0.7% of 739 cases" occurred in children below 16 years of age (3). The male to female ratio in children is said to be 4: 1(1). Diarrhea precedes the onset of RS in 80% of the cases unlike that in adults where diarrhea is not a prominent feature (4). *Shigella flexneri*, *Yersinia enterocolitica*, *Salmonella enteritidis*, *S. oranienburg* and *S. typhimurium* have been isolated in children with postdysenteric

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RS(4). *Chlamydia trachomatis* and *Mycoplasma tiny* have been isolated from synovial fluid (4).

Arthritis is a presenting complaint in one fourth of patients with RS. As a rule, the disease is oligoarticular with joints of the lower extremities being most commonly involved (4). Our patient also had involvement of only three joints in lower limbs. The most common urinary complaint is dysuria. In 30% of patients, urethritis is present at the onset of the disease. Urine analysis may show 5 to 1000 WBCs per high power field. Conjunctivitis is present in 2/3rd of children with RS. Radiographs of joints may be normal, but changes suggestive of RS include soft tissue swelling and sometimes marked juxta-articular osteoporosis. Approximately 90% of patients are HLA B 27 positive (4). Brewerton et al. reported 75.8% positivity for HLA B27 (5). HLA B 27 is said to be associated with more severe joint disease and development of uveitis (6). Our patient being HLA B 27 negative is likely to have a better prognosis.

Aspirin and NSAIDs provide symptomatic relief but there is no evidence that the course of the disease is substantially influenced by their use (1,4). Prednisolone and antibiotics have also been used(4). Our patient did not respond to aspirin. Episodic recurrences have been reported to occur (7). Our patient also has had one recurrence at one year of follow up, but the symptoms were mild.

The occurrence of RS in children should be recognized. Awareness of its clinical features in children combined with appropriate investigations will help to delineate this group of children from other forms of chronic inflammatory joint diseases.

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