

## Case Report

### Reiter's disease in a six-year-old girl

**Sandeep Arora, Gulhima Arora**

Skin Centre, Base Hospital, Delhi, India

Address for correspondence: Sqn. Ldr. (Dr.) Sandeep Arora, Skin Centre, Base Hospital, Delhi Cantt - 110010, India.  
E-mail: sarora@vsnl.com

#### ABSTRACT

Reiter's syndrome has characteristically been described in young males and presents with a triad of urethritis, conjunctivitis and arthritis. Reiter's syndrome has been known to affect children, although they usually do not manifest with the typical triad. Only a few such cases have been reported and these have described males predominantly. A case of a six-year-old girl who presented with watery diarrhea, redness of eyes and joint pains followed by skin involvement is reported. She was managed with topical salicylic acid and hydrocortisone, and oral aspirin and showed complete resolution of her clinical features in three weeks.

**Key Words:** Reiter's syndrome, Female, Juvenile

#### INTRODUCTION

Hans Reiter in 1916 described a case of Reiter's syndrome (RS) in a young soldier with conjunctivitis, urethritis and arthritis following an episode of dysentery. There are only a few reports of Reiter's syndrome affecting children, and most of these involve males.<sup>[1],[2]</sup> We report juvenile Reiter's syndrome in a 6-year-old-girl.

#### CASE REPORT

A six-year-old girl presented with fever and swelling of the left ankle and dorsum of the left foot since seven days. Since one month she had watery diarrhea followed by redness of eyes that had persisted.

On examination, she was febrile, with a temperature of 38.1°C, and appeared ill. There was swelling of the left ankle and dorsum of the left foot with tenderness over the first metacarpophalangeal joint. She also had bilateral conjunctival injection. Well-margined,

erythematous, scaly plaques with adherent limpet-like scaling appeared over the forehead, scalp, back and clitoral region three days after the initial presentation [Figure 1]. These progressed in number over the scalp and the back.

The ESR was 34 mm, Antinuclear antibodies,



**Figure 1:** Widespread keratoderma blenorrhagicum over trunk

**How to cite this article:** Arora S, Arora G. Reiter's disease in a six-year-old girl. *Indian J Dermatol Venereol Leprol* 2005;71:285-6.

**Received:** October, 2004. **Accepted:** January, 2005. **Source of Support:** Nil.



rheumatoid factor, blood, stool, and urethral cultures were all negative. HLA-B27 was absent. The HIV (ELISA) test was negative. A skin biopsy revealed hyperkeratosis, parakeratosis and spongiform pustules.

She was managed with topical salicylic acid and hydrocortisone, and oral aspirin. Her joint symptoms subsided in one week, and skin lesions in three weeks. She was followed up for three months after complete subsidence of clinical features and discontinuation of medications and remained symptom-free.

## DISCUSSION

RS is characterized by the classic triad of urethritis, arthritis, and conjunctivitis, usually following a genitourinary or gastrointestinal infection. Young children are more likely to acquire the post-dysenteric form, whereas in adolescents the post-urethritic form is the most common.<sup>[3]</sup> The full triad may not occur in all patients, and does not usually present simultaneously in children.<sup>[2]</sup>

Lockie reported conjunctivitis as the commonest manifestation in children.<sup>[4]</sup> Although typically described as bilateral and mucopurulent, it may range from mild infection, so as to pass unnoticed by the patient, to severe inflammation. Non-specific urethritis is generally limited to a mild, painless, and non-purulent urethral discharge. Diagnosis of urethritis in young children may be difficult given the milder clinical signs. Urethritis can also be a post-dysenteric phenomenon, apparently non-sexually acquired. This may possibly be due to urethral inflammation by mechanisms other than direct infection.<sup>[5]</sup>

Arthritis is usually the most prominent feature. The presence of peripheral arthritis involving lower limbs is significant.<sup>[5]</sup> Cuttica reported arthritis in 100% of patients.<sup>[2]</sup> The knees are the most frequently affected joints and then the ankles.<sup>[4]</sup> In most patients, the arthritis is self-limiting and lasts only a few months. However it may persist in some cases for years.<sup>[6]</sup>

Mucocutaneous lesions occur frequently in RS and may confirm the diagnosis. Balanitis and vulvitis are rare in

children and are highly suggestive of RS. Keratoderma blennorrhagicum manifests initially as macules and vesicles which later develop hyperkeratotic papules and plaques with a pustular center. Oral erosions and ulcers may develop in some patients. HLA B27 association in children is not well established. Histopathological findings are similar to psoriasis.

Management includes aspirin and other non-steroidal anti-inflammatory agents for the arthritis. Topical salicylic acid and hydrocortisone are effective in treating the cutaneous lesions. Antibiotic treatment of urethritis or gastroenteritis should be given depending on culture results.

No juvenile case of RS has been reported in association with HIV infection. Our case was HIV negative.

Our patient, a six-year-old girl, presented with a history of diarrhea followed by conjunctivitis. The conjunctivitis had intermittently persisted till presentation after a month. The arthritis was typical with, involvement of the lower limb and peripheral involvement affecting the ankle and the first metatarsal joint. Skin involvement had manifested with the appearance of lesions of keratoderma blennorrhagicum, which were quite widespread. The early age of presentation, in a female, with widespread cutaneous lesions are the interesting features of this case.

## REFERENCES

1. Sehgal VN, Srivastava G. Reiter's disease: a five year prospective study. *Indian J Dermatol Venereol Leprol* 1986;31:67-70.
2. Cuttica R, Scheines E, Garay M, Romanelli M, Maldonado C J. Juvenile onset Reiter's syndrome. A retrospective study of 26 patients. *Clin Exp Rheumatol* 1992;10:285-8.
3. Ansell BM. Reactive arthritis/Reiter's syndrome in children. *Clin Exp Rheumatol* 1994;12:581-2.
4. Lockie G, Hunder G. Reiter's syndrome in children. *Arthritis Rheum* 1971;14:767-72.
5. Bernard A. Reiter's syndrome: Diagnosis and clinical features. *Rheum Dis Clin North Am* 1998;24:677-95.
6. Zivony D, Nocton J, Wortmann D, Esterly N. Juvenile Reiter's syndrome: A report of four cases. *J Am Acad Dermatol* 1998;38:32-7.

