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REITERS SYNDROME WITH BILATERAL KERATITIS – A RARE CLINICAL PRESENTATION

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Abstract: Reiter's syndrome is a seronegative spondyloarthropathy characterized by triad of urethritis, arthritis, and conjunctivitis. It is generally preceded by either a chlamydial genitourinary infection, or an enteric infection by *Shigella*, *Campylobacter*, or *Salmonella*. Common ocular manifestations in RS are conjunctivitis and uveitis. Corneal involvement is rare and not well recognized as a complication of RS. Involvement of the cornea in the form of a bilateral disciform keratitis in a first episode of Reiter's is an extremely rare feature, with only two previous reports. We present a case of 20 year old boy diagnosed with Reiters syndrome who developed bilateral stromal keratitis following a spontaneous epithelial defect, which resolved on treatment with antivirals. Bilateral stromal keratitis can occur as a complication of Reiter's syndrome. Also the possibility of secondary infection of the epithelial defect needs to be borne in mind. In 1916 Hans Reiter described the syndrome characterized by the triad of urethritis, conjunctivitis, and arthritis. Reiter's syndrome is a relatively rare seronegative spondyloarthropathy characterized by a triad of urethritis, arthritis, and conjunctivitis^{1,2,3}. Human leukocyte antigen B27 (HLA B27) is positive in over two-thirds of the patients. Reiter's syndrome generally occurs in the second to fourth decades of life, occurring 1 to 4 weeks after a genitourinary infection (male to female ratio 9:1) or an enteric infection (male to female ratio 1:1) caused by *Campylobacter*, *Salmonella*, and *Shigella*.^{2,3} Ocular manifestations include conjunctivitis (96%) and anterior uveitis (92%), while rare ocular involvements are posterior uveitis (64%), scleritis (28%), cataract (56%), glaucoma (16%), papillitis (16%), retinal and disc edema, and retinal vasculitis.³ Corneal involvement is rare and not well recognized as a complication of RS. The keratitis may be in the form of superficial punctate keratitis with pleomorphic anterior stromal infiltrates, deep interstitial keratitis, anterior stromal infiltrations with epithelial defect. In this case report we describe an unusual corneal involvement in both the eyes of a patient with RS.³

Keywords: Reiters Syndrome, *Shigella*, *Campylobacter*, or *Salmonella*



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INTRODUCTION

A 20 yr old male patient was referred to the ophthalmology OPD with redness and pain in the right eye of two days duration. The patient had presented with low grade fever, bilateral knee pain and burning micturition, he also had pustular lesions over the trunk and axilla and genital examination revealed balanitis and was diagnosed as Reiters syndrome.



Fig 1 showing patient had bilateral knee arthralgia



Fig 2



Fig 3

Fig 2 & 3 showing pustular lesions in the axilla

Examination of the right eye showed conjunctival congestion with a clear cornea and a quiet anterior chamber. Visual acuity was 6/6 in both eyes and IOP was normal. A possible conjunctivitis associated with RS was suspected and patient was started on topical antibiotics and lubricants. The next day he was sent again with worsening pain and drop in visual acuity. Examination revealed and epithelial defect 5/4 mm with ragged edges and underlying stromal infiltrates. Corneal sensations were diminished and the deep stromal haze precluded the view of posterior structures. In view of reduced sensation a possible viral etiology was suspected and patient was started on topical acyclovir 3% five times daily and systemic acyclovir 400mg five times daily. Epithelial defect started to improve and infiltrates started to regress. Similar

findings were noted in the left eye also after two days and the same treatment was instituted. After the epithelial defect healed patient was started on topical prednisolone which was tapered over 4 weeks. Complete resolution took 4 weeks when all medications were stopped. Presently, the patient has a small residual nebular corneal opacity in both eyes with visual acuity of 6/9 in each eye



Fig 4 showing stromal infiltrates in the left eye



Fig 5 showing stromal infiltrates in the right eye with an overlying epithelial defect

Corneal involvement is rare and not well recognized as a complication of RS and has been very rarely reported. To the best of our knowledge only three authors have reported disciform keratitis in patients with Reiter's syndrome, two occurring during the first episode of the syndrome while the other developing in chronic recurrent Reiter's syndrome.

Mark and McCulley ^[1] described left eye disciform keratitis with hypopyon in one case with chronic Reiter syndrome. Unilateral disciform keratitis developed a month after anterior stromal keratitis and epithelial defect in that eye. Suresh PS ^[2] reported a case of bilateral disciform keratitis with hypopyon in the left eye occurring during first episode of Reiter's syndrome.

Khandgave TP et al ^[3] reported similar case with bilateral disciform keratitis and hypopyon. However in our patient prompt treatment with antivirals led to rapid resolution of symptoms and recovery. This case is being reported for its rarity and it should be kept in mind that keratitis could be an ocular manifestation of reactive arthritis in young patients.

REFERENCE:

1. Mark DB, McCully JB. Reiter's keratitis. Arch Ophthalmol 1982; 100: 781-4.
2. Suresh PS. Bilateral disciform keratitis in Reiter's syndrome. Indian J Ophthalmol 2013.
3. Khandgave TP, Puthran N, Kulkarni VN. Bilateral disciform keratitis: A rare feature of Reiter's syndrome. J Clin Ophthalmol Res 2015; 3: 102-4.
4. Rowson NJ, Dart JK. Keratitis in Reiter's syndrome. Br J Ophthalmol 1992; 76: 126.
5. Kozeis N, Trachana M, Tyradellis S. Keratitis in reactive arthritis (Reiter Syndrome) in childhood. Cornea 2011 Aug; 30(8): 924-5. doi: 10.1097/ICO.0b013e3182000916.