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TREATMENT OF REITER'S DISEASE

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Two classical cases of Reiter's disease, one successfully treated with methotrexate and the other with sulphasalazine, are reported.

Key Words: Reiter's disease, Methotrexate, Sulphasalazine

Introduction

Reiter's disease is a multisystem disorder classically described as a triad of urethritis, arthritis and conjunctivitis. Keratoderma blenorrhagicum is found in some cases. All the components may not be found at the same time. The response to treatment is variable. Mild joint pains may only need rest. Others may need nonsteroidal anti-inflammatory drugs, corticosteroids or methotrexate depending on the severity of the disease.[1]

Sulphasalazine has not yet been used in Reiter's disease. We report here 2 cases one controlled with methotrexate and the other with sulphasalazine. The difference in response to the 2 drugs is discussed.

Case Reports

Case 1: A 24-year-old unmarried male presented with burning micturition, joint pains and skin lesions of 2 months duration following diarrhoea 1 month earlier. Patient had mild mucoid discharge per urethra along with circinate balanitis. There was swelling of the large joints with restriction of movements. The pain started in the left ankle, spread to involve both knees, shoulders, interphalangeal joints and spine. The skin showed generalized involvement including palms and soles characterised by erythematous macules, papules, pustules and plaques with multi-layered crusts.

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Investigation showed a haemoglobin of 12 gms%, ESR of 40 mm in 1st hour. Radiological examination showed a soft tissue swelling of the involved joints. Histopathology of skin corroborated the clinical diagnosis.

The patient was treated with tetracyclines in the dosage of 500 mg 6 hourly for first 15 days which controlled the urethritis without any improvement in the other manifestations. Prednisolone used in the dosage of 40 mg per day for 1 month had no effect. Addition of methotrexate in a dose of 7.5 mg/ week intramuscularly showed improvement in the joint and skin lesions by the third week. Methotrexate was continued with tapering of corticosteroids. Patient had become asymptomatic with complete improvement by 12 weeks. Methotrexate was given for 2 more weeks and stopped.

Case 2: A 22-year-old promiscuous, single, male presented with burning micturition, discharge per urethra, joint pains and skin lesions which appeared sequentially in 1 month. He had an episode of diarrhoea 15 days prior to the appearance of the above symptoms. There was history of scanty mucoid urethral discharge with erosions of glans and prepuce. He had a non-suppurative polyarthritis which began in the left knee and spread later to ankles, wrists and shoulder joints. Movements were restricted and the skin overlying the joints was erythematous. Effusion was noted in the left knee. Macules, papules, pustules and plaques with multi-layered, thick, crusts were seen on the face, trunk and extremities including the palms and soles.

Investigations revealed haemoglobin of 4.8 gms%, ESR of 66 mm in 1st hour. Radiological examination of joints showed a soft tissue swelling. Histopathology of skin was consistent with the clinical diagnosis of Reiter's disease.

Initial treatment with tetracyclines 500 mg 6 hourly for 15 days controlled the urethritis. Indomethacin in the dosage of 25 mg thrice daily for 2 weeks did not show any improvement in the joint and skin lesions. The effusion in the left knee required tapping. Patient was given 0.5 gm sulphasalazine per day for the first week, 1 gm/ day for the second week and 1.5 gm/day for the third week and was maintained in this dosage till the patient stopped the treatment on his own at the end of 2 months.

Improvement in the skin and joint lesions was noted at the end of the first week. Complete clearance of skin lesions and joint pains and swelling was seen by 4 weeks of sulphasalazine.

Elisa test for HIV was negative in both cases. HLA-B27 studies were not done due to lack of facilities.

Both patients have been followed up for 5 months and have remained asymptomatic.

Discussion

The diagnosis of Reiter's disease in both the cases was mainly based on the clinical features supplemented by histopathological findings.

There is no specific treatment for Reiter's disease. However spontaneous remissions are noted in some patients within 6 months. Tetracyclines are used to control underlying infections. Non-steroidal anti-inflammatory drugs, corticosteroids, antimetabolites like methotrexate and azathioprine have all been used depending on the severity of the disease and response. One of our patients responded well to methothrexate used weekly for 14 weeks.

In the other patient we used sulphasalazine empirically which is a second line drug used in the treatment of reheumatoid arthritis.[2,3] Clinical improvement in the skin and joint involvement was remarkable.

The mechanism of action of sulphasalazine is unclear. Inhibition of prostaglandin biosynthesis, inhibition of random migration of polymorphonuclear leucocytes and superoxide production by them and inhibition of the lipoxygenase pathway are some of the mechanisms described leading to anti-inflammatory action.[4] Any one or a combination of these mechanisms may have played a role in controlling the signs and symptoms in our patient.

There was a definite difference in the treatment response to the 2 drugs in our patients. The response to sulphasalazine was faster as compared to methotrexate. Moreover sulphasalazine is a safer drug than methotrexate. Further studies are required to confirm these findings.

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