ZINC IN BEHCET'S SYNDROME

Ashok Kumar Khare, Gurmohan Singh and Shyam Sundar Pandey

A 16-year-old male patient having Behcet's syndrome showed marked improvement with zinc sulphate when other therapeutic modalities had failed.

Key words : Behcet's syndrome, Zinc sulphate, Treatment.

Behcet's syndrome is a chronic triple-symptom syndrome of oral and genital ulcerations and ocular inflammation.[1] Other systemic associations of this syndrome are now recognised. Diagnostic criteria have been divided into major and minor criteria. Major criteria include oral, genital, eye and skin lesions whereas minor criteria include gastrointestinal lesions, thrombophlebitis, cardiovascular lesions, arthritis, central nervous system lesions and a positive family history. The original three major criteria or two major and two minor criteria are required for the diagnosis of Behcet's syndrome.[2] Various drugs such as phenformin,[3] ethyloestrenol,[3] corticosteroids,[4] chlorambucil,[5] levamisole,[6-8] colchicine[9] and dapsone,[10,11] have been tried for the treatment of Behcet's syndrome. We have tried zinc sulphate in a case of Behcet's syndrome who was not responding satisfactorily with systemic and topical corticosteroids. There was a marked improvement in the lesions with the administration of zinc sulphate and reversion of the condition when this drug was stopped.

Case Report

A 16-year-old boy started having photophobia, pain and redness in the eyes with moderate fever without rigors and chills two months ago. The next day he felt burning sensation in the upper abdomen especially after the meals. There was no vomiting, hematemesis, pain in the abdomen or abnormal bowel habit. About a week later, he developed multiple painful ulcers throughout the oral cavity. There was difficulty in taking meals due to the pain in the oral cavity. With antacids, there was relief in the abdominal symptoms but the ocular and oral lesions progressed gradually. After a month, he noticed a large painful ulcer at the coronal sulcus of the penis. Within 2-3 days, the whole circumference of the coronal sulcus was involved along with the appearance of four painful scrotal ulcers. About 15 days after the development of the genital lesions, all the proximal nail folds became painful and exuded purulent discharge on pressure. At the time of admission, he had aphthous stomatitis like lesions in the whole of the oral cavity, bilateral conjunctivitis, superficial genital and scrotal ulcers, paronychia of all the digits, and erythemato-squamous papules and plaques on the palms and soles. A diagnosis of Behcet's syndrome was made. Systemic antibiotics and systemic corticosteroids along with topical corticosteroids were prescribed. Eye and genital lesions responded well in $1\frac{1}{2}$ month's time, whereas paronychia took about 3 month's time to disappear partially along with loss of the nails in a few fingers and toes. There was no relief at all in oral lesions. During the treatment, there was off and on aggravation of various lesions except the genital ulcerations. A few months later, the oral lesions extended upto the throat and he had severe pain while

From the Department of Dermatology and Venereology Institute of Medical Sciences, Banaras Hindu University, Varanasi-221 005, India.

Address correspondence to : Dr Ashok Kumar Khare, Section of Skin and VD, RNT Medical College Udaipur-313 001, India.

swallowing even fluids. Oral levamisole in a dose of 150 mg daily was added to the treatment. After 3 weeks, levamisole was stopped as there was no improvement at all. Then, zinc sulphate in a dose of 440 mg daily in two divided oral doses was added to the treatment. The paronychia started improving within a week's time and oral lesions showed improvement in 2 week's time. After a month, zinc sulphate was stopped. Within a week of stopping the zinc sulphate, the oral lesions and paronychia of toes resumed the old picture. Zinc sulphate was restarted in the same doses and we again observed marked healing in the oral ulcers and the paronychia of the toes. Simultaneously, we started tapering off corticosteroids. The disease did not show any aggravation.

Comments

Though various drugs have been tried for the treatment of Behcet's syndrome, the results are not always satisfactory. Our case was receiving topical and systemic corticosteroids but the oral lesions and paronychia failed to improve satisfactorily. With a high dose of corticosteroids these lesions became stationary only. Later on there was appearance of side effects of corticosteroids such as hypertrichosis, stria atrophicans, mooning of the face etc. When we reduced the dose of corticosteroids, the progression of these lesions restarted. Because of non-healing of oral ulcers and paronychia even with a high dose of corticosteroids, progression of the disease on reducing the corticosteroids and appearance of side effects we had to give some other drug. We thought of zinc sulphate because of its wound healing property. There was marked healing of oral ulcers and paronychia, and the patient started taking meals without much discomfort. At that time, we believed that either zinc has caused its specific effect in Behcet's syndrome or the disease itself has gone into the remission phase. On stopping zinc sulphate, the paronychia and oral ulcers started increasing again with much discomfort to the patient. On restarting the drug, our patient improved once again. Because of these withdrawal and exposure responses to zinc sulphate, we believe that zinc sulphate deserves further trials for the treatment of Behcet's syndrome.

References

1. Farah FS : Behcet's syndrome, in : Dermatology in General Medicine, Second ed, Editors, Fitzpatrick TB, Eisen AZ, Wolff K et al : McGraw Hill Book Company, New York, 1979; p 907-909.
2. Mason RM and Barnes CG : Behcet's syndrome with arthritis, Ann Rheum Dis, 1969; 28 : 95-103.
3. Cunliffe WJ and Menon IS : Treatment of Behcet's syndrome with phenformin and ethyloestrenol, Lancet, 1969; 1 : 1239-1240.
4. O' Duffy JD, Carney JA and Deodhar S : Behcet's disease : Report of 10 cases, 3 with new manifestations, Ann Int Med, 1971; 75 : 561-570.
5. Mamo JG : Treatment of Behcet's disease with chlorambucil : A follow up report, Arch Ophthalmol, 1976; 94 : 580-583.
6. Merieux PD, Spitler LE and Paulus HE : Treatment of Behcet's syndrome with levamisole, Arthritis Rheum, 1981; 24 : 64-70.
7. Hamza MH, Ayed K and Ayed HB : Treatment of Behcet's disease with levamisole, Arthritis Rheum, 1982; 25 : 714-715.
8. Lavery HA and Pinkerton JHM : Successful treatment of Behcet's syndrome with levamisole, Brit J Dermatol, 1985; 113 : 372-373.
9. Miyachi Y, Taniguchi S, Ozaki M et al: Colchicine in the treatment of the cutaneous manifestations of Behcet's disease, Brit J Dermatol, 1981; 104 : 67-69.
10. Sharquie KE : Suppression of Behcet's disease with dapsone, Brit J Dermatol, 1984; 110 : 493-494.
11. Convit J, Goihman-Yahr M and Rondon-Lugo AJ : Effectiveness of dapsone in Behcet's disease, Brit J Dermatol, 1984; 111 : 629-630.