MESALAZINE IN TREATMENT OF PSORIASIS

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Mesalazine- a 5 lipoxygenase inhibitor was tried in this open trial on 20 psoriatics. Whereas 50% patients (10) had complete clearance in 4 weeks, by 12 weeks 85% (17) patients had good response and 15% (3) patients had no relief at all. No side effects were observed. Further longitudinal double-blind trials of this drug, which has an advantage of not causing bone marrow depression and oligospermia over sulfasalazine, another 5 lipoxygenase inhibitor, are advocated.

Key Words : Psoriasis, Treatment, Mesalazine

Introduction

The illusion of treating psoriasis continues and limitations of conventional modalities and disillusionment with systemic modalities (liver scare of methotrexate, mutagenic potential of PUVA and skeletal toxicity of retinoids) necessitate search for newer/safer drugs. Inhibitors of 5 lipoxygenase (synthesising enzyme of leukotriene) have shown promise. Mesalazine is one of these which exerts antiinflammatory effect, probably by inhibiting PG synthesis, leukotrienes and PAF etc. It is absorbed, acetylated and excreted in urine and it has an advantage of not causing bone marrow depression and decreased sperm count[1] as has been observed with another 5 lipoxygenase inhibitor-sulfasalazine (salazopyrin) used by other researchers.[2-5] This study was undertaken to evaluate the efficacy of mesalazine.

Materials and Methods

Twenty psoriatics attending the skin OPD of Sri Guru Ram Das and Civil Hospitals of Amritsar with more than 20% body area involvement (determined by Wallace's rule of 9) were included in this open trial after their consent. After recording histories on a proforma and getting the routine investigations especially for hepatorenal function, the patients were treated with mesalazine (TIDACOL) 400mg tds along with local application of beclomethasone (0.025%) and salicylic acid (3%) in ointment base (Betagel-S) not exceeding 50gm in a week and/or tar (Annie) shampoo on alternate days for scalp lesions. The response of each patient was recorded using the ESI (erythema, scaling, and induration) grading scale every week for maximum 12 weeks.

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Results

The study included 12 males and 8 females of ages between 20-70 years with a mean age of 36.2 years. Patients had an average duration of ailment of over five years and had 20-80% body area involvement. Routine investigations of all patients were within normal limits.

50% (10) patients had complete clearing of erythema, scaling and thickness of psoriatic lesions in 4 weeks time, 7 patients continued treatment for another 4-8 weeks-3 of them had clearance of lesions in total 10 weeks and 4 had more than 90% clearance in 12 weeks time. None of those ten patients, who had a clearance in 4 weeks, showed any relapse in 12 weeks. 15% (3) patients had no relief in 4 weeks and so were shifted to other modalities. No patient reported any side effects subjectively or objectively

Discussion

Accumulation of leucotriene (LTB4), a dihydroxy metabolite of arachidonic acid, with potent neutrophil chemotactic properties contributes to the pathology of psoriasis. Inhibitors of its synthesizing enzymes (5 lipo-oxygenase) like sulfasalazine or benoxaprofen have been found to benefit patients with moderate to severe psoriasis.[6] A double blind trial in 1989 by Menne et al of 5 aminosalicylic acid in cream base and an open study of oral sulfasalazine[2] indicate that both of these lipoxygenase inhibitors may be effective in psoriasis treatment. Sulfasalazine is a compound of 5 aminosalicylic acid (5ASA) with sulfapyridine linked through an azo bond. Whereas 5ASA has an antiinflammatory effect the sulfapyridine moiety only carries 5ASA to the colon and it is this moiety which is responsible for adverse effect like rashes, fever, joint pain, haemolysis and blood dyscrasias. Not only that sulfasalazine is reported to cause male infertility.Mesalazine (mesalanine) is 5ASA which has been formulated as delayed release preparation by coating with acrylic polymer and a 400mg tablet of if is estimated to provide quantities of 5ASA that would be released from 1gm of sulfasalazine. It is absorbed, acetyleted in liver and excreted in urine and may have side effects like nausea, diarrhoea, pain in abdomen, headache, rashes. Hypersensitivity reactions are rare and bone marrow depression and decreased sperm count has not occurred. It has some nephrotoxic potential. The suggestion of more longitudinal studies in a double-blind manner is the final outcome of the moderate to good results of the present study (open ended, pilot).

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