

# Combination therapy of immunosuppressants in dermatology: A new concept

Sir.

This is in reference to the original article by Singh *et al.* entitled "Safety and efficacy of methotrexate (0.3 mg/kg/week) versus a combination of methotrexate (0.15 mg/kg/week) with cyclosporine (2.5 mg/kg/day) in chronic plaque psoriasis: A randomised non-blinded controlled trial'. Combinations of immunosuppressants are being used since decades in chemotherapy for malignancies as well as in other non-malignant conditions, for example, rheumatoid arthritis. It is an innovative article which throws light on the new approach of using combination of immunosuppressants in the field of dermatology, yet it raises some queries.

In this study, methotrexate alone and a combination of methotrexate and cyclosporine have been compared but in the combination, methotrexate has been given in a dose half (0.15 mg/kg/week) of the dose given in group one (0.3 mg/kg/week). To compare the synergistic effect of combination versus single drug therapy, doses in both the groups should be comparable. In fact, the outcome of adverse effect profile is also biased if in one group the dose of a drug is half of the dose given in the other group.

We had also reported the combination of methotrexate and azathioprine in difficult to treat dermatoses. In this report, we used same doses when methotrexate and azathioprine were used alone and in combination (15 mg/week methotrexate and 100 mg azathioprine daily). We have also found synergistic action of these two drugs when used in combination, as compared to when used alone, without increased incidence of side effects.

In Table 4 tabulating the clinical adverse effects, nausea, vomiting, dyspepsia, abdominal pain, anorexia and fever have been repeated which is creating a false impression of the number of adverse effects studied.<sup>1</sup>

The idea of using combination of immunosuppressants in dermatology is new. We should explore new combinations to see if these are more effective without increased incidence of side effects.

### Declaration of patient consent

Patient's consent not required as there are no patients in this study.

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#### **Conflicts of interest**

There are no conflicts of interest.

# Uma Shankar Agarwal, Rachita Mathur, Puneet Agarwal

Department of Skin, V.D. and Leprosy, S.M.S. Medical College, Jaipur, Rajasthan, India

Corresponding author:

Dr. Rachita Mathur, Department of Skin, V.D. and Leprosy, S.M.S. Medical College, Jaipur, Rajasthan, India. rachimathur@gmail.com

## References

- Singh SK, Singnarpi SR. Safety and efficacy of methotrexate (0.3 mg/kg/week) versus a combination of methotrexate (0.15 mg/kg/week) with cyclosporine (2.5 mg/kg/day) in chronic plaque psoriasis: A randomised non-blinded controlled trial. Indian J Dermatol Venereol Leprol 2021;87:214-22.
- Willkens RF, Urowitz MB, Stablein DM, McKendry RJ Jr., Berger RG, Box JH, et al. Comparison of azathioprine, methotrexate, and the combination of both in the treatment of rheumatoid arthritis. A controlled clinical trial. Arthritis Rheum 1992;35:849-56.
- Willkens RF, Sharp JT, Stablein D, Marks C, Wortmann R. Comparison of azathioprine, methotrexate, and the combination of the two in the treatment of rheumatoid arthritis. Arthritis Rheum 1995;38:1799-806.
- Agarwal P, Agarwal US, Meena RS, Sharma P. A combination of oral azathioprine and methotrexate in difficult to treat dermatoses. Indian J Dermatol Venereol Leprol 2017;83:389-92.

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