

# **The effectiveness of Nigella sativa , methotrexate and their combination in the treatment of moderate to severe psoriasis**

## **ABSTRACT**

**Objective:** Methotrexate (MTX) is a commonly prescribed drug for patients with psoriasis. Nigella sativa (NS) has been shown beneficial in vitiligo and in eczema. Recently, NS has shown activity in modifying psoriatic lesions.

**The aim of this study:** was to evaluate the effect of the combination (NS+MTX) on psoriasis and to compare that with NS or MTX monotherapy.

**Methods:** Sixty patients with moderate to severe plaque, palmoplantar and guttate psoriasis were enrolled for 12 weeks study. The patients were divided into 3 groups; 20 patients in each. Group 1 was treated with NS ointment (20% w/w) 2 times daily + 500 mg NS capsule 3 times daily. Group 2 received MTX tablets 15 mg weekly and group 3 received MTX + NS (topical + oral).

**Results:** Marked response was achieved in 60%, 80%, and 90% of patients on NS, MTX, and (NS + MTX) respectively. The respective relapse rate was 33.3%, 56.3%, and 27.8%. Serum malondialdehyde (sMDA), a parameter of oxidative stress was decreased from  $4.39 \pm 0.81$  to  $2.31 \pm 0.72$   $\mu\text{mol/L}$  with NS treatment while a small increase in sMDA was observed with

MTX. NS + MTX treatment reduced sMDA from  $4.39 \pm 0.67$  to  $3.49 \pm 0.65$   $\mu\text{mol/L}$  after 12 weeks treatment. All treatments did not change liver enzymes or complete blood count. NS was well tolerated and showed ability in ameliorating gastric upset of MTX.

**Conclusion:** NS augments antipsoriatic effect of MTX. Topical and oral use of NS is effective and safe in moderate to severe psoriasis. J Clin Exp Invest 2014; 5 (4): 521-528