

Characterization of lipid profile in psoriasis, acne vulgaris and androgenetic alopecia: A case-control study.

Published in: (Egyptian journal of Dermatology and Venereology. Accepted in August-2020)

Background: Disturbance in lipid metabolism may play a role in psoriasis pathogenesis. Relation between lipids and acne has been studied and significant dyslipidemic findings were reported. In androgenetic alopecia (AGA), the role of androgens is not completely established and non-androgenic mechanism may be involved.

Objective: To study lipid profile in patients with psoriasis, acne and AGA and its relation to severity for its possible role in the etiopathogenesis of these diseases.

Methods: 25 psoriasis patients, severity of psoriasis was evaluated by PASI score, 25 acne patients, severity of acne was evaluated by GAGS, 25 AGA patients evaluated by The Norwood-Hamilton scale for males and Ludwig scale for females and 25 healthy controls. Detailed history, clinical examination, BMI and laboratory estimation of serum lipids (cholesterol, TGs, LDL-C and HDL-C), were performed for all participants.

Results: There was a significant increase in LDL, in each of psoriasis, acne and AGA as compared to controls ($p < 0.05$). Cholesterol, TGs were significantly higher only in psoriasis compared to controls ($p < 0.05$). HDL was significantly lower in psoriasis, acne and AGA patients in comparison to controls ($p < 0.05$) and it was negatively related to severity in psoriasis and acne.

Conclusion: Psoriasis, acne and AGA are associated with atherogenic lipid profile more prominent in psoriasis and not related to known atherosclerotic risk factors. Patients with psoriasis and less likely acne and AGA may be at risk of atherosclerosis and consequently CVD.

Key words: Psoriasis, acne, androgenetic alopecia, lipid profile.