Article (5)

Characterization of lipid profile in psoriasis, acne vulgaris, and androgenetic alopecia: a case–control study

Abstract:

Background: Disturbed lipid metabolism may play a role in psoriasis pathogenesis. Relationship between lipids and acne has been studied, and significant dyslipidemic findings were reported. In androgenetic alopecia (AGA), the role of androgens is not fully established, and nonandrogenic mechanisms may be involved.

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

Materials and methods: The study included 25 patients with psoriasis, where the severity of psoriasis was evaluated by psoriasis area and severity index score; 25 patients with acne, where the severity of acne was evaluated by Global Acne Grading System; 25 patients with AGA, who were 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، triglycerides, low-density lipoprotein-cholesterol, and high-density lipoproteincholesterol) were performed for all paricipants.

Results: There was a significant increase in low-density lipoprotein in each of psoriasis، acne, and AGA groups as compared with controls (P<0.05). Cholesterol and triglycerides were significantly higher only in psoriasis compared with controls (P<0.05). High-density lipoprotein was significantly lower in patients with psoriasis، acne, and AGA in comparison with 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, being more prominent in psoriasis and not related to known atherosclerotic risk factors except obesity. Patients with psoriasis and less likely acne and AGA may be at risk of atherosclerosis and consequently cardiovascular disease (CVD).

Keywords: acne, androgenetic alopecia, lipid profile, psoriasis