

COMMENTARY

Atopic dermatitis and metabolic syndrome: lifestyle or systemic inflammation?

Atopic dermatitis (AD) is an inflammatory skin disease and has over the last 5 years been subject to studies to show whether or not it is a systemic inflammatory disease, and whether it as such increases the risk of other conditions including the metabolic syndrome. The metabolic syndrome is based on the presence of three out of four conditions: obesity, dyslipidaemia, hypertension and diabetes. Inspired perhaps by studies in psoriasis, epidemiological studies of AD have lately also focused on the derived disease of the metabolic syndrome including cardiovascular diseases such as myocardial infarctions and stroke. Studies have shown a positive association¹ yet this has been and is still controversial, as other studies are unable to show this association if the patients' lifestyle, especially smoking, is taken into consideration.^{2,3} Large clinical follow-up studies are missing although a few do exist. One clinical study, although small, has in detail through the use of PET-CT scans shown that patients with severe AD compared with healthy controls do have increased cardiovascular atherosclerosis without any increased prevalence of smoking.⁴ Thus, the jury is still out, and more studies are direly needed.

In this issue, Shalom *et al.*⁵ examine 116 816 patients and compare them with 116 812 controls in a cross-sectional study based on medical database of Clalit Health Services, Israel, with regard to prevalence of the metabolic syndrome and its related diseases including ischaemic heart diseases, congestive heart failure, stroke and peripheral vascular disease. Within the findings are that among AD patients, the prevalence of the metabolic syndrome is significantly lower than the controls as that of diabetes, whereas the prevalence of hyperlipidaemia is higher. Furthermore, they find that among the entire AD population, current smoking is less common than controls. When the data are stratified based on the severity of the disease, the results interestingly show increased smoking among the patients with moderate-to-severe disease, and even when adjusting for this, the group of moderate-to-severe AD patients have an increased prevalence of the metabolic syndrome.

However, at the end of the day, dermatologists still need to encourage all AD patients to stop smoking, to exercise and to maintain a healthy lifestyle, no matter the severity of the disease. Yet, this study contributes to the discussion on whether AD *per se* increases the risk of metabolic syndrome and related disease, or not. In a balanced way, the study shows that AD is not just AD. The severity and lifestyle of the patients are closely associated, as are the comorbidities, and perhaps extra care should be given to those with moderate-to-severe disease.

Conflicts of interest

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