

Editorial

Psoriasis and the heart, what can a dermatologist do?

Psoriasis has been the focus of research in the last decade, with more understanding of the disease, it has been regarded as a systemic inflammatory disease more than skin deep. Besides the well-known joint manifestation, there are rapidly growing studies in other associations including but not limited to cardiovascular system, gastrointestinal tract, malignancies, metabolism and mood disorders. Collaboration with other specialists to optimise care for psoriasis patients is not uncommon.

As metabolic syndrome is more prevalent in psoriatic patients, a higher prevalence of cardiovascular disease in these cases may be expected. However, there is well-established evidence showing psoriasis itself is one of the independent risk factors for major adverse cardiovascular events (MACE).¹ Earlier this century, researchers had already shown that severe psoriasis patients were more likely to have a heart attack, a stroke, and a higher cardiovascular mortality rate than people without psoriasis.² A meta-analysis revealed the relationship between MACE with the severity of psoriasis: the risk ratio for MACEs in mild psoriasis was 1.03 (95% CI 0.86-1.125) and for severe psoriasis was 1.39 (95% CI 1.11-1.74). The risk ratio for myocardial infarction in mild psoriasis was 1.29 (95% CI 1.02-1.63) and for severe psoriasis 1.70 (95% CI 1.32-2.18).³ Psoriasis patients were also found to have a poorer prognosis after myocardial infarction than those without psoriasis.⁴ The observed morbidities and increased mortality are hypothesised to be related to the chronic inflammation of psoriasis. From then onward, physicians were more aware of these potential

life-threatening comorbidities. Dermatologists are not just treating the skin of patients with psoriasis, but can also play an essential role in identifying and screening for cardiovascular risk factors.

In this current issue, researchers in Spain further looked into the relationship between psoriasis severity and carotid intima-media thickness (IMT). The research studied the carotid IMT by carotid ultrasound for 100 psoriasis patients who did not receive systemic therapy and showed that patients with more severe skin disease have a thicker IMT. This study illustrates the need to screen for risk factors of MACE especially for patients with severe psoriasis.

Since the first dose of biologics given to psoriasis patient in 2003, we have seen a tremendous change in the treatment strategy for psoriasis. However, does the treatment we offer also reduce the risks for MACE? Psoriasis and cardiovascular disease are both characterised by similar immunoinflammatory pathways including chronic type 1 helper (Th1) T cell and Th17-mediated inflammation, thus biologic agents, by reducing the T cell mediated inflammation, may improve both the skin and decrease the risk on MACE. A 5-year cohort study demonstrated the cardioprotective effect for tumour necrosis factor inhibitors or methotrexate, but not for cyclosporin and oral retinoids.⁵ Also, Youssef et al showed a 40% reduction in coronary plaque volume as measured by coronary tomography angiograph after one year of biologic use, which was not observed in the control group.

Cardiovascular diseases and stroke remain the third and fourth leading causes of death respectively in Hong Kong.⁶ Despite the fact that the risk of cardiovascular disease is increased, psoriasis patients are often not adequately screened and undertreated for the associated risk factors.⁷ Dermatologists were found to screen for cardiovascular risk factors infrequently.⁷ As dermatologists, we should inform our patients about the cardiovascular risks and recommend screening for risk factors. The latest AAD guidelines suggest screening includes blood pressure, haemoglobin A1C, lipid levels, abdominal circumference and calculation of BMI. Reminders on life style modification can be life-saving and we, as dermatologists can play a greater role.⁸

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References

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