Psoriasis is a common inflammatory condition involving the skin, scalp, nails, and joints. It significantly increases the risk of cardiovascular events and death in those affected, above Framingham Risk Score prediction alone. There is a dose-response element; those with the most severe psoriasis (assessed by the psoriasis area severity index score) are at the greatest risk. A UK study estimated the excess risk as equivalent to having a diagnosis of diabetes mellitus.

Psoriasis severity was significantly positively associated with vascular inflammation, even after adjusting for Framingham Risk Score and C-reactive protein levels. Supportive of their findings was a retrospective study by Prodanovich et al. showing that patients with psoriasis treated with methotrexate had decreased rates of vascular FDG PET as a marker of inflammation, but failed to meet their primary end point in a larger, randomized study with the potent anti-inflammatory drug adalimumab. Interestingly, a retrospective study by Prodanovich et al. showed that patients with psoriasis treated with methotrexate had decreased rates of vascular disease when compared with controls. It will be instructive to see whether the same holds true in the Cardiovascular Inflammation Reduction Trial that will randomly allocate 7000 patients with prior myocardial infarction and either type 2 diabetes mellitus or the metabolic syndrome to low-dose methotrexate or placebo over an average follow-up period of 3 to 5 years.

Summary

This work extends the use of imaging to uncover potentially important links between 2, on the face of it, different conditions. It seems plausible that, as the authors suggest, smouldering skin lesions produce inflammatory cytokines that can trigger remote inflammation. This has recently been reported, albeit in reverse, after myocardial infarction, where global inflammation is upregulated after an acute coronary syndrome putting patients at high risk of recurrent events. Naik et al.'s study was cross-sectional, and as acknowledged by the authors, their hypotheses need to be confirmed or refuted by ongoing longitudinal studies to prove cause and effect.

In terms of psoriasis management, their study elegantly illustrates the paradox of significant vascular inflammation.
yet low Framingham scores and provides an explanation for it via neutrophil-mediated inflammation. Whether psoriasis patients should undergo testing for subclinical atherosclerosis21 or receive aggressive statin therapy is not known, but the case is strengthened by this article. By providing mechanistic insights between psoriasis and atherosclerotic inflammation, this study suggests new therapeutic targets that could be exploited to lower the excessive cardiovascular disease burden that these patients experience.

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Disclosures
None.

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Psoriasis: More Than Just Skin Deep
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