





Unmasking Peripheral Arterial Disease in Diabetic Patients Presenting With Inflammatory Skin Manifestations During the COVID-19 Pandemic

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Dear Editor:

We read with great interest the study by Zinder et al¹ describing 3 patients with COVID-19-induced skin changes. According to Zheng et al,² 2 types of pathological changes of skin lesions in COVID-19 patients prevail: the skin immune-inflammatory reaction characterized by infiltration of inflammatory cells in the dermis, and vasculitis due to structural damage of vascular endothelium and microvascular embolism.

In a systematic review,³ the prevalence of COVID-19 cutaneous manifestations was 0.2% to 20.5%. This wide variation indicates that more clinical data are needed to further identify the causal relationship between the virus and skin changes. Furthermore, the potential relationship between COVID-19 and diabetic foot cannot be excluded.⁴ It remains unclear if the production of proinflammatory cytokines in the event of a COVID-19 infection aggravates diabetic foot or vice versa.⁴ This bidirectional relationship could be augmented in the presence of peripheral arterial disease (PAD), leading to a triple catastrophe.

In this context, we should not fail to detect PAD. Indeed, medical history, physical examination (palpation of peripheral pulses), and measurement of ankle-brachial index (ABI) are important in the vascular evaluation of patients with distal foot lesions. ABI measurement is a minimally invasive, highly diagnostic, time sparing, and cost-effective diagnostic tool of PAD, as well as a predictive tool for future cardiovascular events in high-risk patients.^{5,6} Moreover, some patients with PAD do not present with typical claudication but with other atypical leg symptoms, functional impairments, or are asymptomatic, necessitating expert vascular consultation. Early recognition of PAD may prove decisive in overall risk evaluation and management of complications in hospitalized COVID-19 patients.

Unfortunately, Zinder et al¹ appear not to have included thorough vascular assessment of reported patients, even though distal ischemia consistent with “COVID-toe” was

described in 1 patient.¹ Indeed, it appears that decision for bullae evacuation and surgical debridement was based only on subjective criteria without ABI measurements. Thus, PAD may have been underdiagnosed.

In conclusion, data on skin lesions in COVID-19 remain useful. In this endeavor, we should not fail to appreciate the importance of PAD. The latter frequently remains underreported and is diagnosed late with serious implications. Clearly, improvement is needed in this area.

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