

Noteworthy Localized Purpuric Eruptions in a COVID-19 Patient

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Figure 1: Purpuric eruptions of various sizes spread over the whole left upper extremity, with remarkable edema.

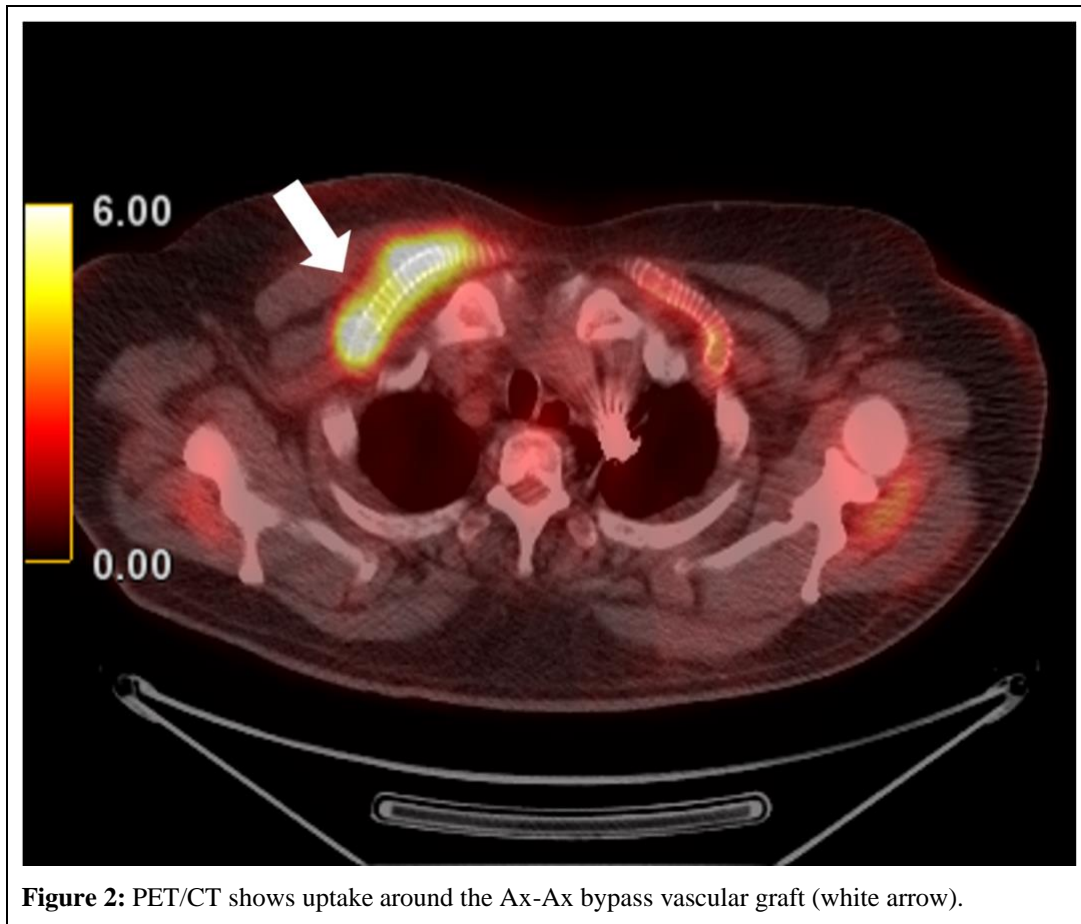


Figure 2: PET/CT shows uptake around the Ax-Ax bypass vascular graft (white arrow).

Clinical Image

A 49-year-old male visiting a clinic with a fever tested positive for COVID-19. He was referred to our hospital three days later because of a persistent fever and a rash on his left upper extremity.

Purpuric eruptions of various sizes had spread over the whole left upper extremity, with remarkable edema (Figure 1). Blood tests showed leukocytosis and elevated C-reactive protein. Although the skin lesions were atypical for a necrotizing soft tissue infection, antibiotic treatment was initiated. Methicillin-Resistant *Staphylococcus aureus* (MRSA) was detected in blood cultures.

The patient had undergone thoracic endovascular aortic repair (TEVAR) and an axillary–axillary artery (Ax–Ax) bypass for a Stanford type B aortic dissection four years earlier. We suspected a vascular graft infection because of the positive blood culture with MRSA, history of vascular graft surgery, and vasculitis-like purpura confined to the limb. FDG PET-CT (fluorodeoxyglucose positron emission tomography/CT) showed an accumulation of FDG around the Ax-Ax bypass vascular graft (Figure 2). No sign of infective endocarditis was noted on echocardiography.

S. aureus is reported to be the most common cause of secondary bacteremia in COVID-19 patients [1]. The localized purpuric eruptions could have been caused by a septic embolism in the distal lesion of an infected vascular graft [2]. Although vasculitis-like localized purpuric eruptions are rarely reported in association with COVID-19 [3], septic emboli due to Staphylococcal bacteremia should be considered. This case demonstrated that localized purpuric eruptions may manifest in potentially fatal diseases such as vascular graft infections.

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