Janeway Lesions as the Primary Sign of an Infected Radial Artery Aneurysm after Cannulation

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A CASE REPORT

A 52-year-old man with subarachnoid hemorrhage (Fisher 2, World Federation of Neurosurgical Societies Grading Scale 1) underwent endovascular coiling and was admitted to the intensive care unit for standard of care treatment. For invasive blood pressure monitoring, an arterial line was established in the right radial artery.

Three days after removal of the arterial cannula, the patient developed multiple erythematous macules and papules similar to Janeway lesions in the dependent circulation of the right hand (Fig. 1a). The cannulation site was initially tender with a small papule, but it appeared swollen and infected 24 h later (Fig. 1b).

Microbiological swabs from the papules revealed multi-sensitive Staphylococcus aureus; this was treated intravenously with cefazolin. Ultrasound showed a radial artery pseudoaneurysm with relevant extravasation (Fig. 1c), requiring open reconstruction under regional anesthesia (axillary plexus block). The patient did not develop any signs of systemic infection and no signs of reduced perfusion of the right hand.

Local infections and pseudoaneurysms are typical but rare complications after radial artery cannulation. The present case illustrates that cutaneous septic emboli can be the first sign of infection after cannulation of the radial artery, even though the cannulation site appears almost unaffected at first.
Fig-1: Janeway lesions (a) 3 days after arterial line removal and infection of the cannulation site (b) 24 h later. Ultrasound image of the radial artery aneurysm (c)

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