

## [ PICTURES IN CLINICAL MEDICINE ]

## A Case of Suspected COVID-19 Vaccine-related Thrombophlebitis

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Picture 1.

A previously healthy 45-year-old man presented to the emergency department with swelling and pain of the left neck and a fever. He had received the first dose of the Moderna Coronavirus disease (COVID) 2019 vaccine in his left arm 19 days earlier, and swelling at the vaccination site had developed 10 days ago, gradually progressing to the left neck. On a physical examination, his temperature was 37.4°C, with inflammation noted at the left neck (Picture 1). Contrast-enhanced computed tomography revealed left internal jugular vein thrombus and peripheral pulmonary thromboembolism (Picture 2). He received intravenous antibiotics for suspected Lemierre's syndrome but showed no tonsillitis, and oral infection and blood cultures were negative, so Lemierre's syndrome was excluded. Thrombosis caused by the Moderna vaccine is rare, with no reports of thrombophlebitis. Large local reactions to this vaccine, termed COVID



Picture 2.

arm (1), have been reported. Inflammation caused by the Moderna vaccine may develop into thrombophlebitis.

The authors state that they have no Conflict of Interest (COI).

## Reference

**1.** Johnston MS, Galan A, Watsky KL, Little AJ. Delayed localized hypersensitivity reactions to the Moderna COVID-19 vaccine: a case series. JAMA Dermatol **157**: 716-720, 2021.

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