



## [ PICTURES IN CLINICAL MEDICINE ]

## COVID-19 Vaccination-associated Thoracic Outlet Syndrome

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Picture 1.





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Picture 3.





A 42-year-old woman presented with discoloration and numbness in her left hand the night after receiving a COVID-19 vaccine (Pfizer-BioNTech) in her left shoulder (Picture 1). She had no underlying disease that would have limited blood flow. The discoloration worsened in the drooping position and improved in an elevated position at the shoulder. Computed tomography showed stenosis of the bilateral subclavian arteries and veins in the costoclavicular space. Vascular thoracic outlet syndrome (TOS) was diagnosed (Picture 2, 3). She received the second dose of the vaccine in her right shoulder, without adverse events. The left-sided symptoms persisted, and first rib resection was planned nine months after the onset. She received the third dose of the vaccine in her right shoulder again three weeks before surgery. Discoloration and numbness developed in the right hand the following night, and vascular TOS was again diagnosed (Picture 4). The left-sided symptoms improved immediately after surgery. The right-sided symptoms were treated conservatively with medication, and surgery has not yet been performed. Adverse reactions following COVID-19 vaccination, such as axillary lymphadenopathy or vasculitis, might have affected the already limited blood flow, triggering the TOS onset (1, 2).

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

## References

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