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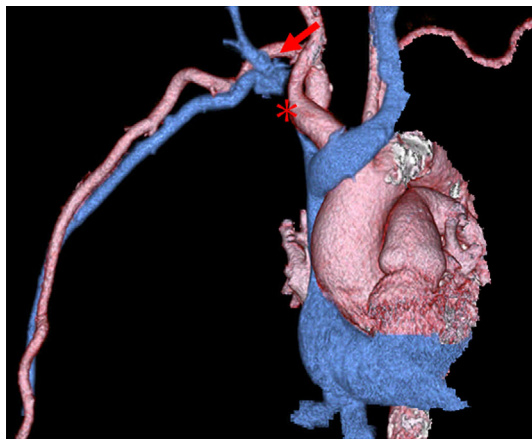
## Brachiocephalic Vein Occlusion from a Tunneled Hemodialysis Catheter

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**Key words:** brachiocephalic vein, occlusion, tunneled hemodialysis catheter

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Picture 1.



Picture 2.



Picture 3.

been placed in the right jugular internal vein. This catheter had been removed and an AVG created six months before admission. Computed tomography revealed occlusion of the right brachiocephalic vein and jugular internal vein (asterisk and arrow, Picture 1). These occlusions were considered to have been caused by the tunneled hemodialysis catheter (1). To restore the AVG blood flow, angiography was performed, which revealed collateral circulation that preserved the right arm blood flow (arrow, Picture 2). The chronic total occlusion of the right brachiocephalic vein was recanalized, and a stent was implanted (Picture 3) (2). The unnecessary use of a tunneled hemodialysis catheter should be avoided due to risks of central venous occlusion, and angiography before AVG placement is helpful for designing AVGs in the opposite arm.

An 81-year-old woman on hemodialysis was admitted for right forearm arteriovenous graft (AVG) thrombosis. One year before admission, a tunneled hemodialysis catheter had

Consent for the publication of this report was obtained from the patient.

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

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