Carotid artery direct access for intracranial stenting of a stroke patient with an aberrant left common carotid artery and right aorta

Weilun Fu, Xinke Liu, Bo Yang, Zhaoyang Yan, Baixue Jia, Ying He, Ning Ma

A right aortic arch is present in 0.1% of the population and can occur in isolation or be associated with congenital heart disease. Moreover, the most common form of right aortic arch in adults is associated with an aberrant left subclavian artery. An aberrant left common carotid artery that originated from the ascending aorta with the right aorta is very rare. In this situation, carotid direct access was considered to avoid access challenge due to a large curve from the ascending aorta to the left common carotid artery. Here we demonstrate carotid artery direct access for intracranial stenting of a stroke patient with aberrant left common carotid artery and right aorta. Manual compression with a long time under general anesthesia to avoid post-procedural puncture site hematoma is recommended (video 1).

Contributors Planning: NM. Conception and design: WF and NM. Acquisition of data: WF, XL, BY, ZY, BJ and YH. Interpretation of data: WF and NM. Final approval: all authors.

Funding The authors have not declared a specific grant for this research from any funding agency in the public, commercial or not-for-profit sectors.

Competing interests None declared.

Patient consent for publication Not applicable.

Ethics approval This study involves human participants and the technical video was approved by the Institutional Review Board of Beijing Tiantan Hospital, Capital Medical University. Approval ID number: QX2022-021-02. Participants gave informed consent to participate in the study before taking part.

Provenance and peer review Not commissioned; externally peer reviewed.

Open access This is an open access article distributed in accordance with the Creative Commons Attribution Non-commercial (CC BY-NC 4.0) license, which permits others to distribute, remix, adapt, build upon this work non-commercially, and license their derivative works on different terms, provided the original work is properly cited, appropriate credit is given, any changes made indicated, and the use is non-commercial. See: http://creativecommons.org/licenses/by-nc/4.0/.

ORCID iD Ning Ma http://orcid.org/0000-0002-4909-7048

REFERENCES