Aortic de-branching before TEVAR with the help of a cross over external carotid artery bypass - Pulsalite cerebral flow to the brain even in the presence of proximal carotid clamp

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Disclosure

Speaker name:
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I have the following potential conflicts of interest to report:

- Consulting
- Employment in industry
- Stockholder of a healthcare company
- Owner of a healthcare company
- Other(s)

X I do not have any potential conflict of interest
Objective:

- Endovascular stent grafting of thoracic aortic pathologies sometimes requires aortic arch debranching, ligation of left common carotid and left subclavian arteries and reimplantation of them to the right common carotid artery.

- Cerebral protection has utmost importance in such a procedure.
Patients and Methods:

- The novel technique was applied in 7 patients with various severe comorbidity factors, with thoracic aortic aneurysms including the aortic arch.

- Either with regional (patients intolerant to carotid clamping) or general anesthesia a cross over bypass was performed between the external carotid arteries with a 6mm PTFE graft.
Results:

- Neurologic complications did not occur.
- TEVAR was successfully performed in the same session except in one patient.
- Mortality occurred in 3 patients in the midterm follow up due to various reasons (myocardial infarction, pneumonia, unknown). Remaining patients are followed a mean of 18.3±4.9 months event free.
Conclusion:

A cross over bypass between the right and left external carotid arteries provides continuous pulsatile flow inside the internal carotid arteries even in the presence of a proximal clamp; hence, a neurologically very safe procedure.
Thank you...
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