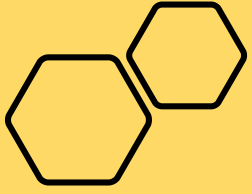


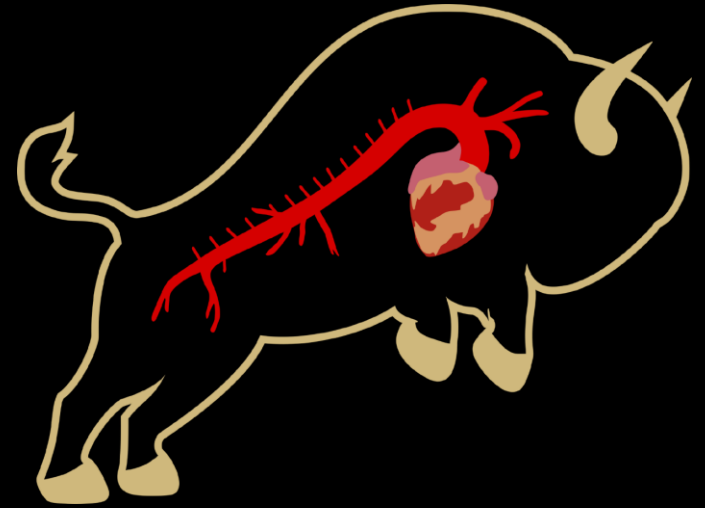
A stylized anatomical illustration of a human torso, showing the heart and major blood vessels in red and purple. The illustration is set against a dark background with a light-colored outline of the body. The text is overlaid on the illustration.

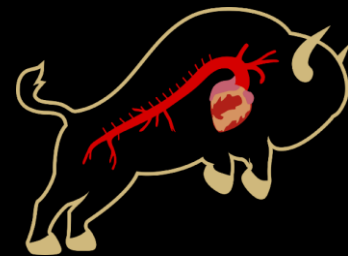
Alternative Surgical Management for Patients Requiring Complex Cardiac Procedures but Unable to Accept Blood Products

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No disclosures

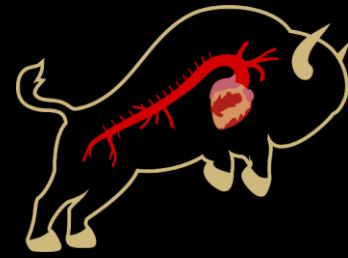




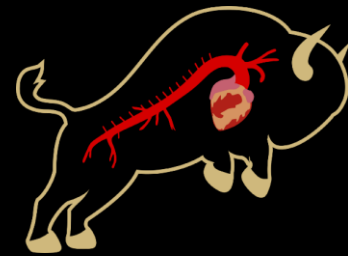
Introduction

- Given the high risk of bleeding, patients who are unable to accept blood products pose a clinical dilemma in aortic arch surgery
- Developing endovascular technology presents an opportunity for management of more complex pathology in patients who would normally require extensive open surgery

Aim

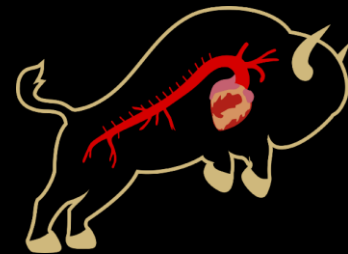


To describe the case of a patient with an aortic root aneurysm and distal aortic arch pseudoaneurysm for which a FET procedure would be standard management, but instead an alternative course of treatment was chosen as the patient was a Jehovah's witness



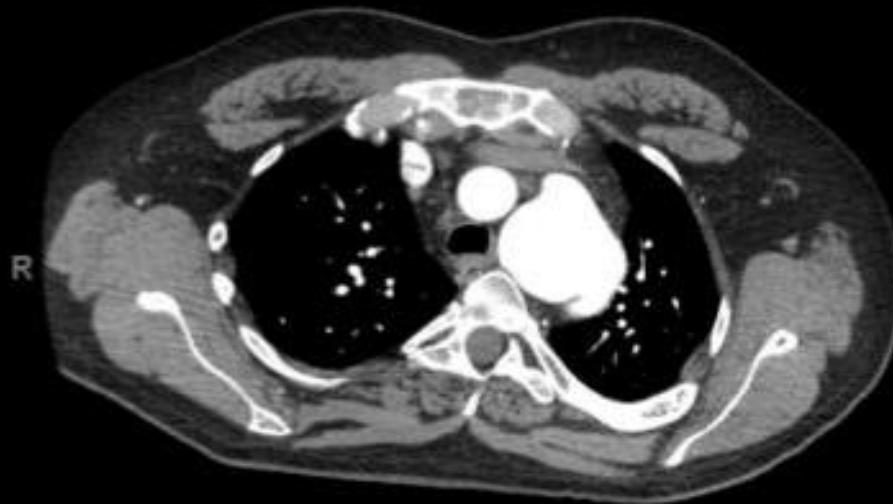
Methods

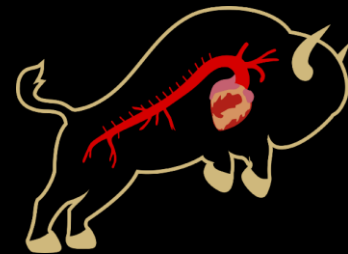
- We discuss the case of a 46-year-old male Jehovah's witness with a history of congenital aortic coarctation involving the distal transverse arch and descending thoracic aorta
- The coarctation was repaired via left thoracotomy when the patient was an infant, however, patient was lost to follow-up until July 2022
- Echo at that time showed a dilated root with a bicuspid aortic valve and a 5.7 cm aneurysm proximal to the site of the coarctation repair



Pre-operative Imaging

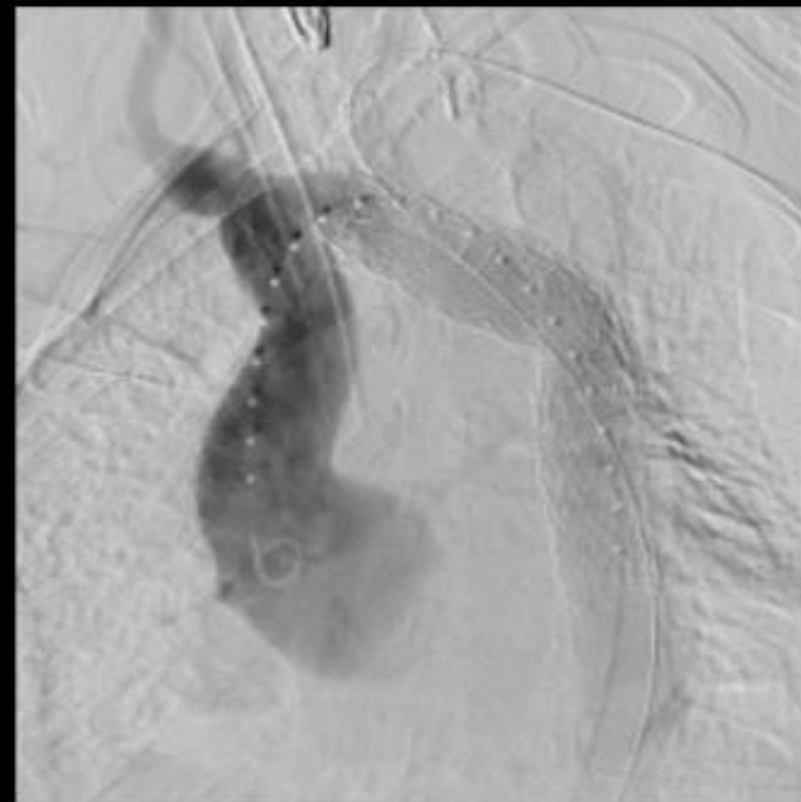
- Pre-operative computed tomography angiography of the initial saccular aneurysm arising between the left common carotid and subclavian arteries, measuring 5.7 x 5.2 x 6.0 cm

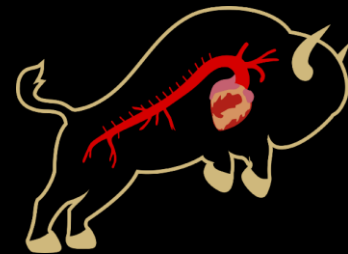




Operative Course

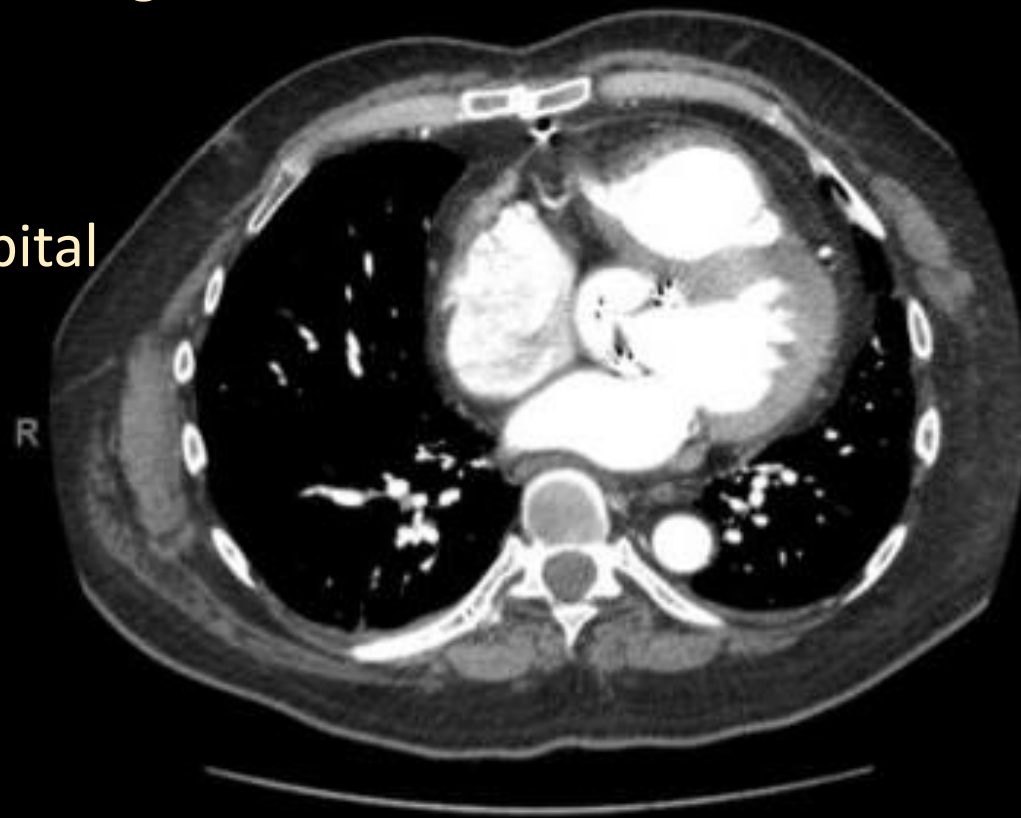
- As an alternative to root replacement and FET, a staged approach was selected
- The first procedure would repair the pseudoaneurysm and would be followed by an aortic root replacement one month later
- For the first procedure, the patient was managed with an endovascular therapy using a GORE-TAG thoracic branched endograft (TBE) with left common carotid artery (LCCA) stent extension of the side portal branch
- Access was first established via the left common femoral and left radial arteries, and the GORE-TAG TBE device was then properly positioned and deployed, with good seal proximal and distal in the aorta

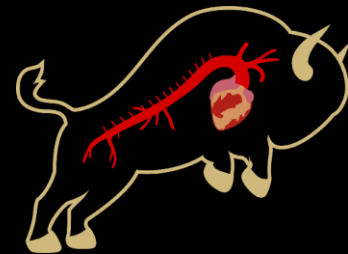




Operative Course

- No endoleak was noted, and there was no filling of the aneurysm, indicating full exclusion
- The patient had an uncomplicated post-operative stay and was discharged on hospital day 3
- The patient underwent subsequent root replacement without complication
- Post-operative CTA demonstrated stable findings without aneurysm





Conclusions

- As endovascular technology develops, new opportunities present for alternative management of complex pathology
- For patients who are unable to receive blood products staged surgeries may be optimal to reduce operative risk
- Surgical consideration of patient's beliefs and values is critical and allows for a patient-centered plan of care

Questions?

