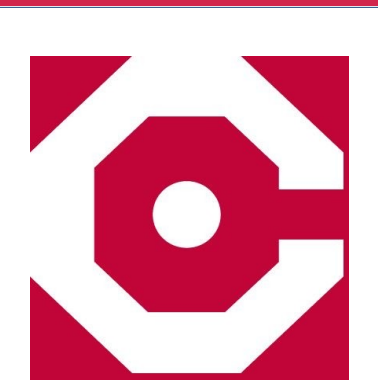


Repair of Symptomatic Aortic Coarctation Pseudoaneurysm with Retrocardiac Extra-Anatomic Bypass and Thoracic Aortic Endograft



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Background

- 51-year-old male with history of multiple pediatric aortic reconstructions for aortic coarctation who presented with severe chest and back pain in the days leading up to admission
- He described 1 month of lethargy, malaise, and progressive severe back pain.
- CT scan demonstrated a large saccular pseudoaneurysm along the proximal aspect of his prior bypass site.
- The patient was taken to the operating room for planned hybrid reconstruction of the aortic arch and exclusion of the suspected pseudoaneurysm sac.

References



Case

- Median sternotomy and placement on cardiopulmonary bypass via cannulation of the distal ascending aorta and the right atrium.
- The apex of the heart was lifted
- A longitudinal incision was made on the pericardium to expose the descending thoracic aorta
- 14 mm graft was sewn too the descending aorta
- Tunneled through the inferior pericardial space posterior to the inferior vena cava and brought to the right side of the heart.
- The proximal end of the graft was anastomosed to the ascending aorta in an end-to-side fashion.
- A 26 x 21 x 100 mm device was deployed in an antegrade fashion with successful exclusion of the distal anastomosis from the prior reconstruction.
- The pseudoaneurysm was repaired using a Dacron patch.

Discussion

- We present the successful utilization of a hybrid approach to reconstructing an aortic pseudoaneurysm in patients with remote history of pediatric aortic coarctation reconstructions
- This extra-anatomic bypass prevented the need for working in a re-operative field through a median sternotomy while successfully utilizing an endograft to prevent persistent filling of the pseudoaneurysm sac

Case Images

