

## AB035. Open repair of Crawford type IV aortic aneurysm with double inferior vena cava: a case report and literature review

Brian Fahey, Mohamed Elsherif,  
Caitriona Canning, Mary Paula Colgan,  
Sean O'Neill, Prakash Madhavan,  
Adrian O'Callaghan, Zenia Martin

Department of Vascular Surgery, St. James' Hospital, Dublin, Ireland

**Background:** Thoracoabdominal aneurysms requiring repair can present a challenging case for vascular surgeons and require extensive pre-operative planning.

**Methods:** We report a case of a thoracoabdominal aneurysm with a double inferior vena cava (IVC) that was treated with an open approach. A literature review of Inferior Vena Cava duplication was also performed.

**Results:** A 78-year-old gentleman with no significant background history was referred to our centre with an asymptomatic aortic aneurysm. He underwent a computed tomography angiogram which revealed a 6.5-cm Crawford type IV aortic aneurysm with a double IVC anomaly. The

Multidisciplinary Team's (MDT) decision was to proceed with an open repair. An oblique incision was made from the 8th intercostal space in the axilla, directed inferiorly and medially to the infraumbilical midline. The peritoneum and left kidney were mobilized medially and superiorly to the diaphragm. At this stage the second IVC was identified and preserved. Careful pre-operative planning and MDT review ensured this was easily identified intraoperatively and prevented inadvertent ligation. Supraceliac clamping was then performed and the sac was opened above and below the left common iliac vein. The proximal anastomosis was bevelled to patch the superior mesenteric artery and both renal arteries using Dacron graft, the graft was then tunnelled underneath the vein followed by the distal anastomosis.

**Conclusions:** It is estimated IVC duplication occurs in 0.2–3% of the general population. This case highlights the importance of pre-operative planning and the role of the MDT to ensure best outcomes for the patient and reduce intraoperative complications.

**Keywords:** Aneurysm; anomaly; aortic; venous

doi: 10.21037/map.2020.AB035

**Cite this abstract as:** Fahey B, Elsherif M, Canning C, Colgan MP, O'Neill S, Madhavan P, O'Callaghan A, Martin Z. Open repair of Crawford type IV aortic aneurysm with double inferior vena cava: a case report and literature review. *Mesentery Peritoneum* 2020;4:AB035.