Hybrid procedure for a Double Thoracic and Infra-renal AAA
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Introduction:
Patients with multi-level aortic disease present a great challenge for any vascular surgeon. The mortality and morbidity rate of surgical repair can be considerably high in these patients, who often exhibit coexisting cardiopulmonary disease.

Case Report:
A 72 years old female, known Hypertensive and Asthmatic, who has been experiencing upper abdominal pain for 3 months was referred to our OPD with Abdominal US that suggested a huge infra renal AAA for management. Patient denies any history of diabetes or other CVS problems and by examination a huge non tender AAA was filling the epigastric, and left hypochondrial region.
Lab investigations excluded any inflammatory changes (normal TLC and CRP), whit rather normal renal and liver functions. CT angiogram from the from arch down to the femorals was done that revealed a saccular aneurysm in the descending thoracic aorta in addition to an 11 cm infra renal AAA with less than 2cm of normal aorta in-between. The celiac artery origin was less than 1 cm distal to the thoracic aneurysm.

Due to the significantly high risk of morbidity and/or mortality which may accompany the conventional open surgical repair and in absence of logistics and funds necessary for a custom made fenestrated or branched EVAR, a decision for a Staged Hybrid procedure was made.

Patient had a successful TEVAR for the descending Thoracic Aneurysm. We used a Cook Zenith TX2, Tapered with Pro-form technique (ZTEG- 2PT- 38- 202- PF) stent graft which was carefully placed to exclude the aneurysm and intentionally covered the Coeliac artery origin after confirming good collateral circulation. Patient was discharged from the hospital 4 days later.

An interval of 3 months was given to allow improvement of the collateral circulation to the spine in order to minimize the risk of spinal cord ischemia with subsequent paraplegia. Patient was then readmitted to the hospital where she had another successful open surgical repair for the infra-renal AAA. (An Aorto-Bliolic bypass using Dacron 16 x 8 mm Bifurcated graft) She was discharged once more from the hospital 10 days after the operation.

Patient showed good recovery along the Follow up period, she is currently back to her normal life.

Conclusion:
A hybrid procedure can be a good alternative and more safe solution than a classic Thoraco-Abdominal surgical repair when fenestrated or branched EVAR is not an available option.