Aortic Banding is Another Bailout Procedure for Type Ia Endoleak

Objective: We describe the technique of aortic banding for the treatment of type Ia endoleak in the infrarenal aortoiliac aneurysm with a severely angulated neck after ch-EVAR was attempted.

Case Presentation: An 83-year-old woman presented with a pulsatile abdominal mass. CTA showed infrarenal aortoiliac aneurysm with a maximal diameter of 7.2 cm in her left CIA. EVAR was performed after sequential IIA embolization. CTA at 1-month post-EVAR showed type Ia endoleak but the patient denied a corrective intervention. CTA at 6-month post-EVAR still showed type Ia endoleak with aneurysm sac expanded to 7.8 cm. After informative discussion, the patient accepted the risk of surgery. An endovascular revision was attempted first. Left renal stenting with aortic cuff extension was performed, but immediate aortogram showed type Ia endoleak. Because of high rupture risk, we decided to perform aortic banding using a PTFE graft. After laparotomy, the infrarenal neck was identified and dissected in standard fashion. The neck was meticulously encircled with PTFE graft, avoiding injury to adjacent structures. The tightness of banding was adjusted by observing loss of pulsation of aneurysm sac and confirmed with intraoperative aortogram which showed no endoleak. Finally, the banding was sutured and fixed with Prolene 3-0.

Result:
The final aortogram showed no endoleak after banding. The patient recovered very well. Surveillance CTA was performed and still showed no endoleak at 3-year follow-up.

Conclusion:
Aortic banding is an alternative bailout procedure for type Ia endoleak after failed ch-EVAR.