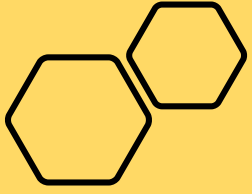




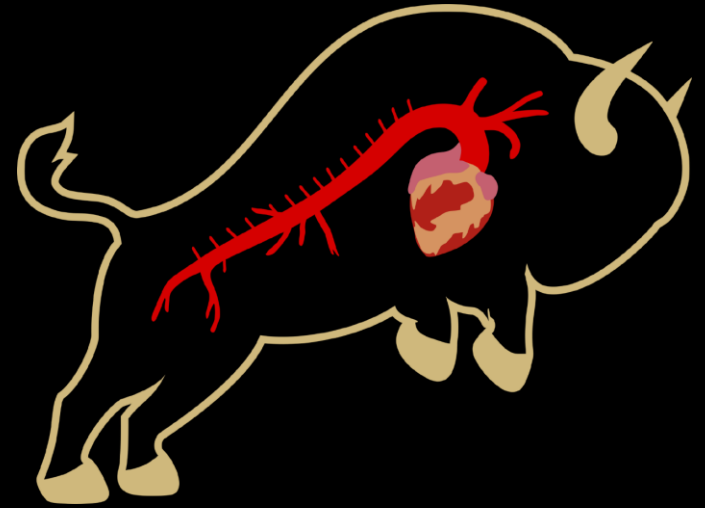
Optimizing Aortic Coverage with Zone 2 Arch Replacement and a Short-Stent Cuff: The “Buff Cuff” Procedure

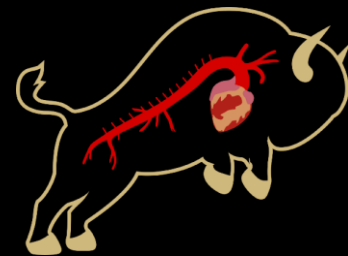
Adam Carroll (1), Michael Kirsch (1), Rafael Malgor (1), Muhammad Aftab (1), T. Brett Reece (1)

(1) University of Colorado Anschutz, Denver, CO



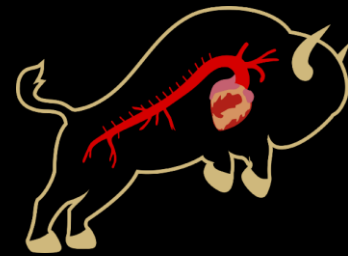
No disclosures





Introduction

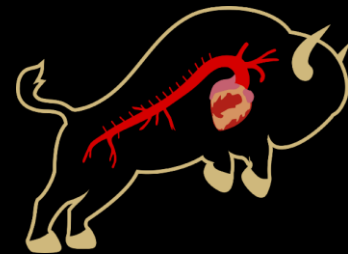
- Although management of extensive aneurysmal disease has improved, further techniques are warranted to optimize stent-graft landing zones
- Arch procedural decision can complicate subsequent Zone 2 stent
 - Distance from LSCA orifice
 - Graft Landing Zone: long better for stent, but proximalizes repair to root
- We developed a novel technique of a short-stent cuff to facilitate a landing zone distal to a zone 2 arch anastomosis



Aim/Methods

- Aim: Discuss the case of a short-stent cuff (mini FET) used to optimize distal aortic endovascular coverage

- Review presentation, operative course, post-operative follow-up

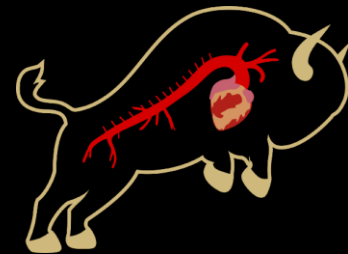


Results

- 63-year-old female with a history of prior mechanical Bentall, ascending aorta replacement, Kommerell diverticulum with aberrant right subclavian artery
 - Presented with mechanical valve stenosis, extensive arch and descending aortic aneurysms
- Prior to addressing arch pathology, underwent robotic division of vascular ring, ligation of aberrant subclavian, transposition to right common carotid artery



Pre-Operative Aortic Reconstruction

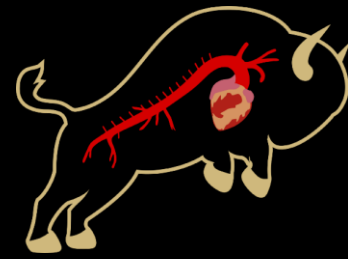


Operative Course

- Innominate, left common carotid divided, sewn to distal and proximal side arms of Spielvogel graft
- Circulatory arrest initiated; remaining aorta resected to zone 2
- Bavaria graft cut to length of 45mm of soft graft distal to the branch takeoffs, small 36x45mm Gore Aortic Extender secured proximally and distally to optimize landing zone
- Complex placed in true lumen, marked line of soft graft, proximal edge of stent, full thickness of aortic wall zone together
- Post-operative course uncomplicated; discharged on day 8

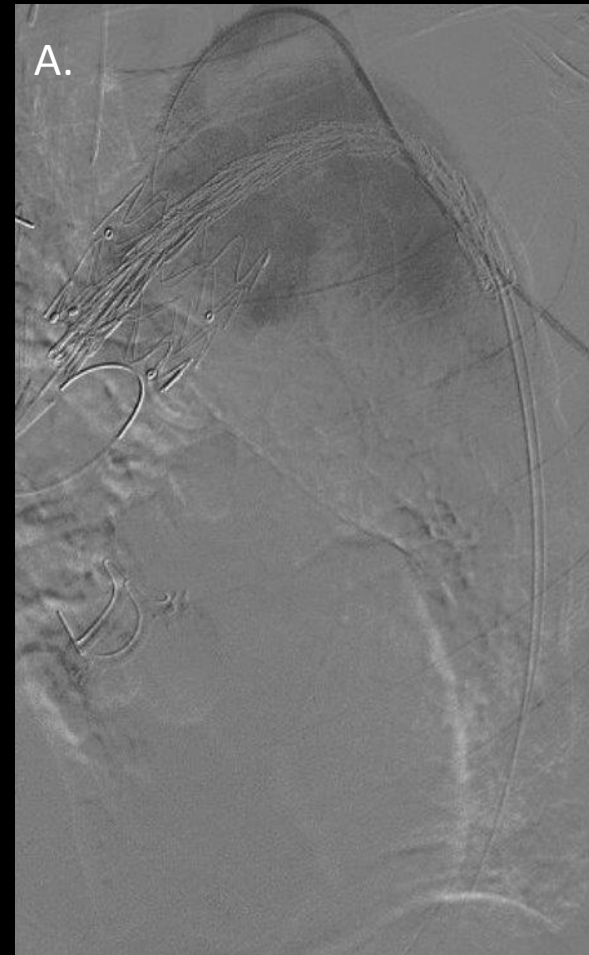


Aortic Reconstruction post “Buff-Cuff” procedure

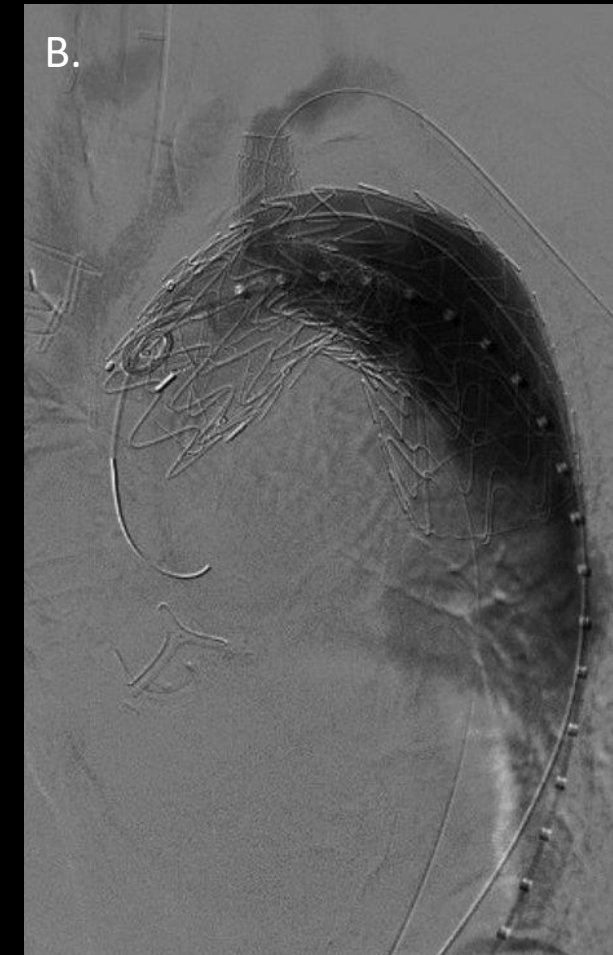


Endovascular Extension

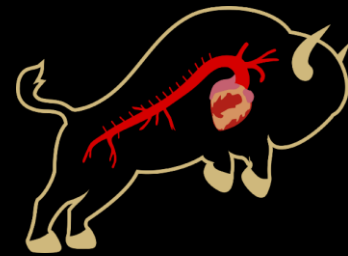
- Return for endovascular extension at three-months
- Zone 2 thoracic branched endograft (TBE) placed
- Additional stent-graft placed proximal to vertebral artery due to short, tortuous aortic arch
- Discharged on post-operative day 2, with stable imaging on three-month surveillance imaging



a) Pre-TBE Deployment



b) Post-TBE Deployment



Conclusions

- A short-stent cuff can be utilized to optimize endovascular extension
- Provides a potential technique to create a landing zone distal to the anastomosis
- At dedicated aortic centers, this procedure can be considered to optimize aortic coverage in select patients

Questions???

