TRANSCAVAL APPROACH FOR TYPE II ENDOLEAK EMBOLIZATION

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DISCLOSURES

None applicable
INTRODUCTION

- Type II endoleaks – retrograde flow most commonly from lumbar and inferior mesenteric arteries
- Non-interventional management standard of care
- Persistent sac enlargement requires intervention
- Endovascular approach superior to open
- Transarterial, translumbar – traditional
MANSUETO 2005

- First reported series on transcaval embolization
- Coil embolization
- Technical success in 10 out 11 patients
PATIENT SELECTION
TECHNIQUE OF TCE

1. Review CTA for optimal anatomy
2. US-guided femoral vein access
3. Venogram
4. Advancement of TIPS needle catheter
5. Puncture into aneurysm sac
6. Blue catheter over wire
7. Removal of TIPS device
8. Exchange for guidewire, catheters in attempt to cannulate feeding vessels
9. Administration of embolizing agent
10. Final completion angiogram
EMBOLIZING AGENTS

Coil embolization

Onyx Embolization

Trufill Glue

Gelfoam
EE 78 M

- Persistent sac enlargement despite previous attempts at coil
- Rösch-Uchida tips needle and sheath
- Puncture into the posterior endoleak sac
- Cyanoacrylate and ethiodol delivered
• EVAR 2014
• Endoleak confirmed via two main lumbar branches
• 9Fr sheath into the right femoral vein
• Coil embolization and 4mL of glue
EF 68F

- 68F s/p AAA repair, persistent AAA sac enlargement despite distal cuff placement and translumbar embolization
- 0.035 coils into the origin of large feeding lumbar vessels
- Cyanoacrylate glue
RESULTS

- There was 100% technical success in all patients selected for transcaval embolization.
- All post-operative CT scans showed resolution of endoleak at 30 days.
- Transient radiculitis was the only noted complication.
DISCUSSION

• Non-interventional management is standard of care
• Statistically comparable outcomes
• Excellent alternative option
• All completed within the angiography suite
• Ultrasound guided access – less radiation burden
• Manual compression for hemostasis
• Less contrast administration
• Not amenable for completely left-sided sacs
CONCLUSION

- High technical success
- Durable treatment for T2E
- Safe
LITERATURE CITED


