

# A Case Report of REBOA Device Use in a Patient with Aortic and Inferior Vena Cava Injury

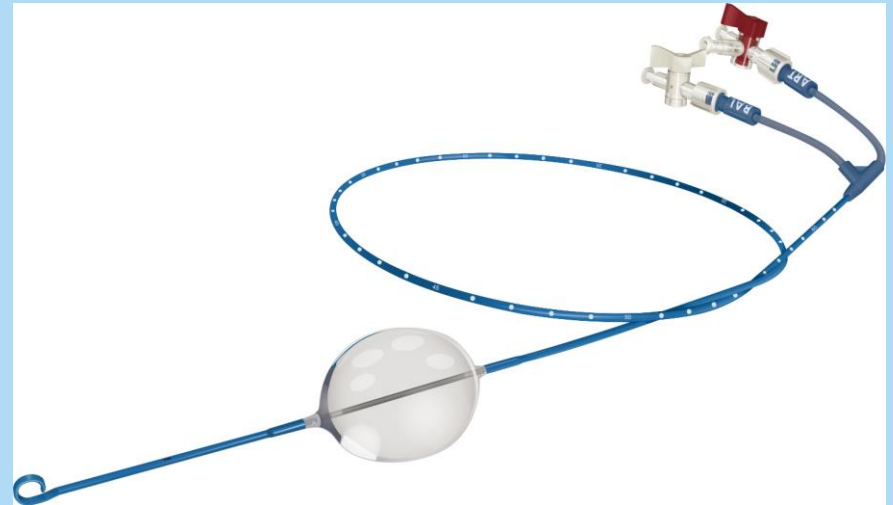
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*Nothing to disclose*



# Introduction

- REBOA is an intra-aortic balloon occlusion device
- Used in the military as an alternative to resuscitative thoracotomy
- Possible strategy for non-compressible penetration injuries





# Case Description: Initial Presentation

- 25 year old male with GSW to left shoulder and right upper abdomen
  - Vitals: BP 131/69, HR 91, RR 24, pain 9/10
- Tender to palpation, no rebound tenderness, 2+ pulses throughout extremities, GCS 15
- FAST exam: intraperitoneal free fluid
- Imaging: right upper quadrant bullet entry marker with bullet fragment in left lower quadrant with no obstruction pattern seen

# Case Description: Surgery-OR

- Abdominal organs inspected and repaired as needed
- Hematoma noted above celiac artery
- Dissection of aorta and IVC- 2 holes with active bright red blood and a palpable thrill
- REBOA device inserted ; both aorta and IVC primarily repaired
- Absent left femoral pulse on catheter removal





# Case Description: Surgery-IR

- No right or left femoral pulse
- Aortogram- high grade stenosis correlated to repair site
- Treated with 16mm tapered to a 12mm x 7 cm Excluder Iliac limb (W.L. Gore, AZ)
- Completion Aortogram: distal aortic flow, bilateral iliac flow and pelvic vasculature flow



# Case Description: Complications

## Early Post-Operation

- Several cardiac arrests
- Rhabdomyolysis
  - Required fasciotomies of calves, thighs, and buttocks
- Possible endograft infection
- Further bowel resection, fluid collection drainage, and feeding tube placement
- Spinal cord ischemia

## Follow-Up

- Bilateral lower extremity split thickness skin grafts
- Bilateral kidney stones
- Nonambulatory but with movement at hips and slight movement at the knees





# Discussion

- Alternative to resuscitative thoracotomy
- Similar complications as experienced with other modalities
- May allow for better control of bleeding and lower mortality rates

# References

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