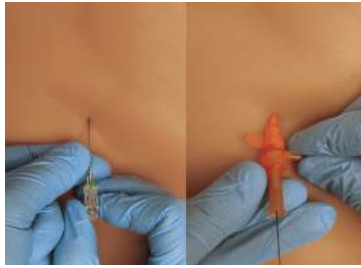


The ER-REBOA™ Catheter Quick Reference Guide

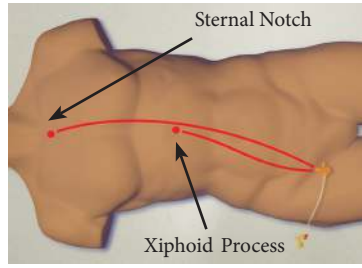
6 REBOA Steps: ME-FIIS (Pronounced 'Me-Fiz')

Get Early CFA Access



Obtain access using standard techniques

1. Measure



Placement depth^{1,2,3,4,5,6}

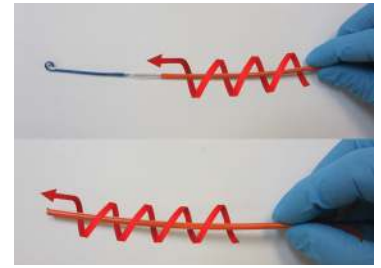
- Zone 1: ~ 46 cm
- Zone 3: ~ 28 cm

2. Empty



Deflate balloon

- Ensure balloon is fully deflated
- Hold vacuum for **5 seconds** and close stopcock



Advance & twist peel-away to cover P-tip®

- Corkscrew twist to wrap balloon tightly
- Ensure the balloon and P-tip® are captured

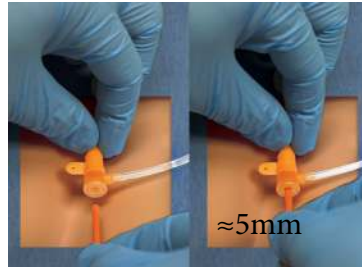
3. Flush



Attach & flush arterial line

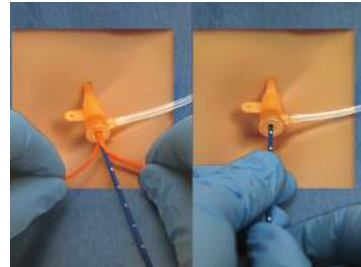
- Use standard techniques
- Ensure all air is purged

4. Insert



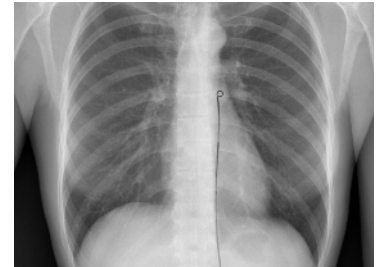
Insert peel-away into valve

- Approximately 5 mm



Advance catheter to desired depth

- Hold orange peel-away
- Advance blue catheter
- Pull peel-away back after balloon passes valve



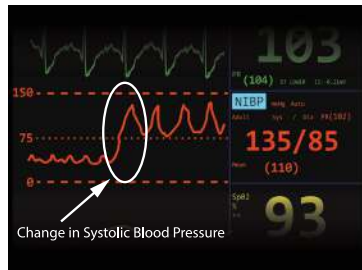
Position catheter

If available, use x-ray or fluoroscopy to confirm position using radiopaque markers

5. Inflate^{1,2,3,4,5,6}

Inflation Volume

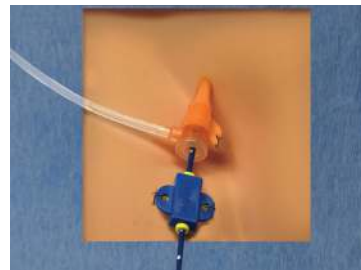
Zone 1	Start with 8 cc
Zone 3	Start with 2 cc



Monitor arterial waveform feedback

- Look for increase in blood pressure above balloon
- Feel for loss of contralateral pulse
- **Mark time of inflation**

6. Secure



Secure Catheter close to the introducer sheath

Provide Definitive Treatment



Provide definitive hemorrhage control

- The clock is ticking!
- Move quickly to definitive control

“Start 2, Start 8, Don’t Overinflate.”

Start small, then check

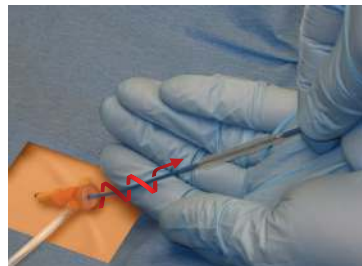
Deflate



Deflate slowly

- Prepare team for potential rebound hypotension

Remove



Fully deflate balloon

- Hold vacuum for **5 seconds** and close stopcock
- Corkscrew twist the catheter to facilitate removal
- If necessary, remove catheter and introducer sheath as a unit

Caution



Check for full and equal pulse in each leg using your standard technique



This instruction is not a replacement for the instruction for use (IFU). The ER-REBOA™ Catheter IFU should be read in its entirety before using the device

1. Joint Trauma System Clinical Practice Guideline (JTS CPG) REBOA for Hemorrhagic Shock (CPG ID: 38)
2. Peay P, Flaris AN, Prut NJ, Cotton F, Lundberg PW, Callot JL, David JS, Voiglio E. Fixed-Distance Model for Balloon Placement During Fluoroscopy-Free Resuscitative Endovascular Balloon Occlusion of the Aorta in a Civilian Population. *JAMA Surg.* 2016 Dec 14.
3. Linnebur M, Inaba K, Halmesmeyer T, Rasmussen TE, Smith J, Mendelsohn B, Grabo D, Demetriades D. Emergent non-image-guided resuscitative endovascular balloon occlusion of the aorta (REBOA) catheter placement: A cadaver-based study. *J Trauma Acute Care Surg.* 2016 Sep;81(3):453-7.
4. McTaggart JN, Foulson WE, Akhter M, Saas A, Tharson K, Phillips WJ, Deyagova AS, Kamrensky AV. Morphometric roadmaps to improve accurate device delivery for fluoroscopy-free resuscitative endovascular balloon occlusion of the aorta. *J Trauma Acute Care Surg.* 2016 Jun;80(6):941-6.
5. Morrison JJ, Starnard A, Midwinter MJ, Sharon DJ, Eliason JL, Rasmussen TE. Prospective evaluation of the correlation between torso height and aortic anatomy in respect of a fluoroscopy free aortic balloon occlusion system. *Surgery.* 2014 Jun;156(6):1044-51.
6. Starnard A, Morrison JJ, Sharon DJ, Eliason JL, Rasmussen TE. Morphometric analysis of torso arterial anatomy with implications for resuscitative aortic occlusion. *J Trauma Acute Care Surg.* 2013 Aug;75(2 Suppl):215169-72.