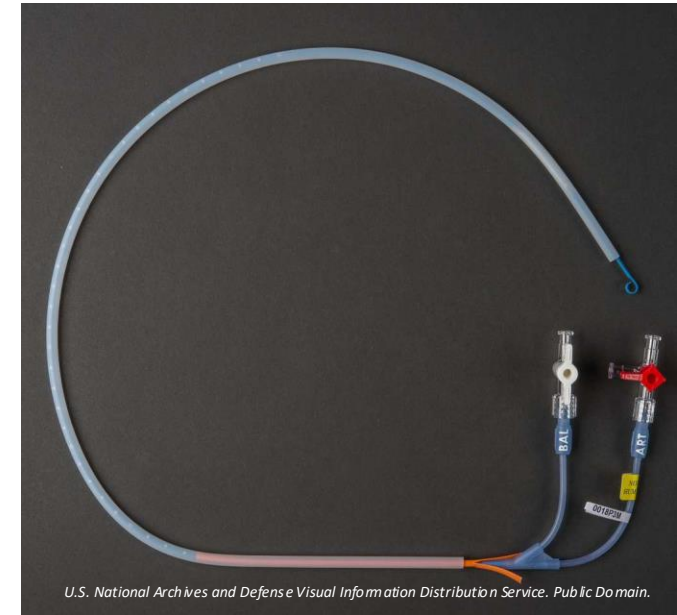


## Background

- Postpartum hemorrhage (PPH) is a major cause of maternal mortality
- Uterine rupture is an emergency that can result in massive PPH and hemorrhagic shock
- If other attempts to halt pelvic hemorrhage fail, all rescue options must be considered

## REBOA

- Resuscitative Endovascular Balloon Occlusion of the Aorta
- Catheter-based technique to temporarily stem/stop blood flow in aorta
- Used for life-threatening bleeding, trauma pts at risk of cardiac arrest



## REBOA to the Rescue: Management of Massive Hemorrhage following Catastrophic Uterine Rupture

Travis Cuddy MD, Lawrence Jones MD, Victor Saxena MD  
Virginia Commonwealth University Medical Center

## Case Presentation

- 36-year-old G2P1 with hx one prior C/S, presented at 40w gestation for TOLAC
- VBAC → brisk vaginal bleeding, manual exam suggested uterine rupture
- Patient taken emergently to OR in distress: gross pallor, HR 146, BP 131/76
- RSI → intubation → added 2x 16ga IVs, left radial A-line
- Initial labs: Hb 11.5, lactate 1.5, platelets 154, fibrinogen 518
- Very extensive uterine rupture, hysterectomy could not be immediately performed
- Multiple rounds of MTP, coagulation still grossly abnormal, ↑↑ vasopressor requirements
- Trauma surgery consulted, REBOA device placed in infrarenal aorta, balloon inflated
- Improved visualization and hemostasis, vitals stabilized as MTP continued
- Upon completion, blood loss 6.6 L, Hb 13.9, lactate 3.6, Plt 72,000, Fbg 296, and TEG wnl
- Pt required no vasopressors postoperatively and was extubated five hours later

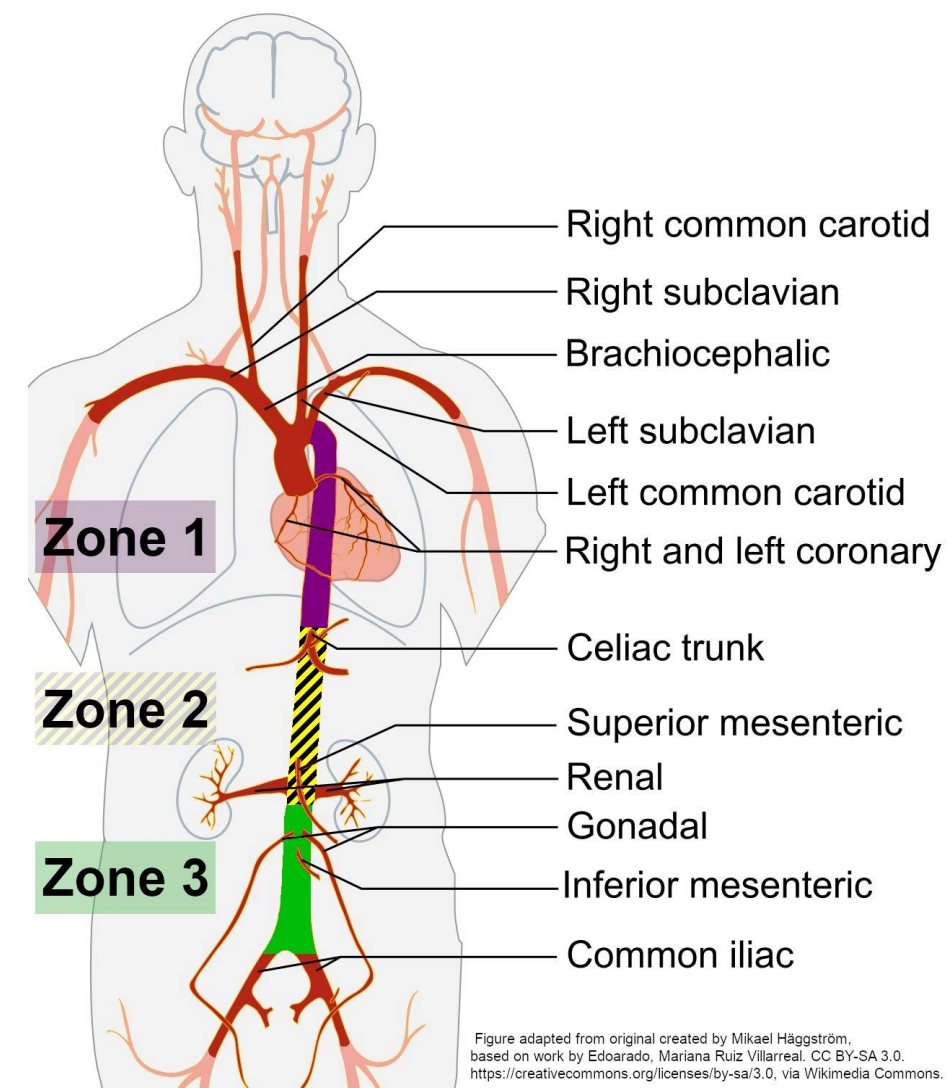


## **REBOA to the Rescue: Management of Massive Hemorrhage following Catastrophic Uterine Rupture**

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## Discussion / Teaching Points

- REBOA becoming more frequently used in obstetrics
  - 1) prophylaxis to limit bleeding during C/S
    - well-defined in placenta accreta spectrum
  - 2) rescue therapy in life-threatening PPH
    - therapeutic utility unclear, limited case series
- Not currently included in any major guidelines
- Deployment described with "zones" - **AVOID ZONE 2**
- Complications include aortic rupture, reperfusion injury, and bowel and/or limb ischemia
- Limit occlusion time and balloon pressure to ↓↓ risk
- Anticipate rapid BP swings on balloon inflation/deflation



## REBOA to the Rescue: Management of Massive Hemorrhage following Catastrophic Uterine Rupture

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