REBOA Is A New Tool For Resuscitation And Treatment For Medical As Well As Hemorrhagic Cardiac Arrest: Who Should Use It And Can It Help Outcomes

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Conflict of Interest

- None
- "No ego, just good science and cooperation"

What is REBOA?

- Resuscitative Endovascular Balloon Occlusion of the Aorta
- ABO (Aortic Balloon Occlusion)
- Endovascular aortic clamping
- In vascular surgery > 20 years
- From 2011 interest in trauma increasing
- Expanding
- Just a tool and part of the EVTM concept
- Limiting factor - vascular access


Three zones for REBOA

REBOA - vascular access

Vascular access is the first and limiting step for REBOA- can be challenging

www.jevtm.org; Top Stent manual 2017; JEVTM textbook (editing) 2019

REBOA in trauma bay

EVTM concept; Hörer editorial 2018 EU / Trauma and emergency surgery; Top Stent 2017
What do we know? Indications

- Case series, reviews, case reports...
- ABO Trauma Registry
- Aorta AAST study
- Japanese data
- UK-REBOA study

Limited data

Sadeghi et al 2017; DelRose 2017; Matsumura 2017; Jansen 2017

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What do we know? Indications

- Torso Non-Compressible bleeding
- i.e Pelvic bleeding
- Non-trauma: PPH, iatrogenic, spontaneous, GI, rAAA

Hörer et al 2016; Morrison 2016; Naploitano 2017; Coulliet et al 2018

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Can it be used in cardiac arrest?

ABO Trauma Registry 3 years results N=138

Sadeghi et al 2017, McGreevy et al manuscript current nr 211

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Advanced techniques – partial/intermittent (pREBOA, iREBOA)

Hörer et al 2016; J Trauma; DelRose J Trauma Acute Care 2017; Advanced J Trauma 2016; Resuscitation 2016; Resuscitation 2018
Advanced techniques – partial/intermittent (pREBOA, iREBOA)

Target your SBP!

Partial REBOA causes less post-reperfusion metabolic and end-organ injury

And already in some guidelines

But for non-trauma?
Summary

- REBOA use is increasing in trauma!
- "Clear" indications in pelvic bleeding/maybe visceral bleeding
- Just a (hemodynamic) tool
- Not only in trauma: The unstable patient!
- Dependent on vascular access
- Part of a concept - Endovascular resuscitation (EVTM)
- Promising for cardiac arrest but we need data. "Bridge?"
- Who should use/do it?
- Non-trauma outcome?

More info on: www.jevtm.com Top Stent manual; EVTMM textbook (editing) and PubMed

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