



# First There First Care: Gathering of Eagles 2023

**Trauma Tips, Tricks, and Tribulations**

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# TRAUMA TRIALS AND TRIBULATIONS

- ***Should needle decompression remain a “life saving intervention” for EMS?***
- Is it time to fundamentally rethink protocols for out of hospital trauma arrest ?
- Do we need to shift the “load and go” paradigm to something else?



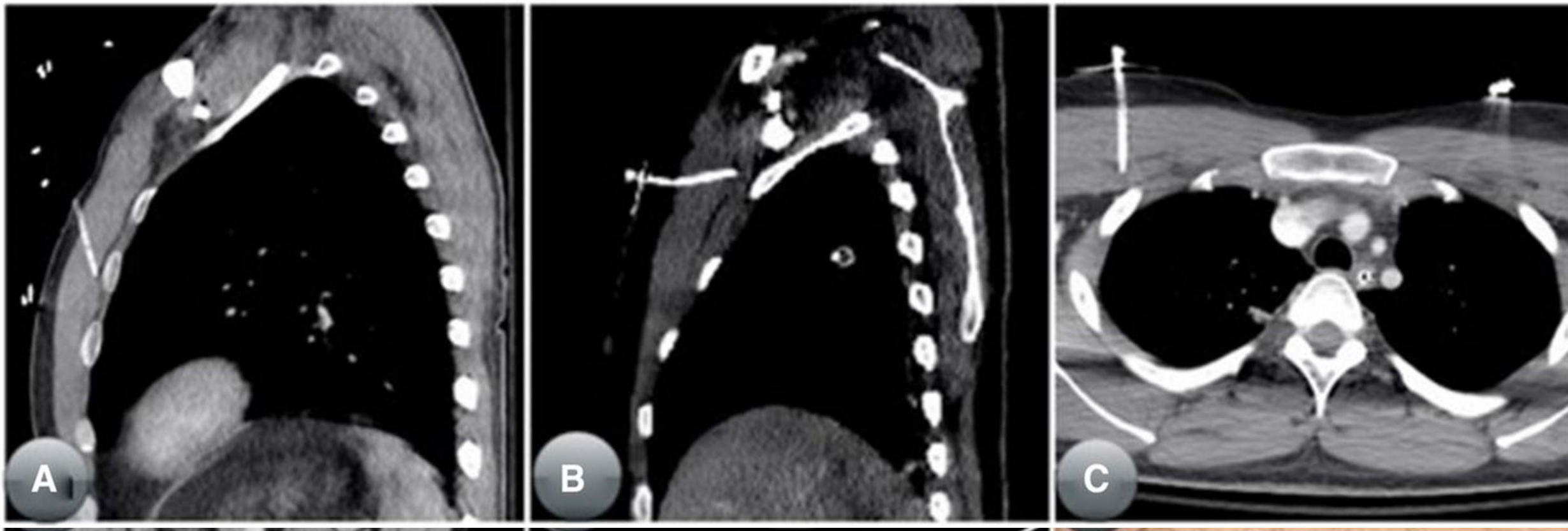


## Needle Decompression

- Rapid, fast
- Fraught with complications
- Diagnostic uncertainty
- Will not resolve hemothorax
- Iatrogenic trauma
- Multiple tools/multiple sites
- **Lifesaving..**



**Examples of complications from improper needle thoracostomy placements: hepatic penetration (A), subdiaphragmatic placement with potential splenic penetration (B), and advancement of both needle and catheter into the thoracic cavity (C).**



**Michael M Neeki et al. Trauma Surg Acute Care Open  
2021;6:e000752**

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**TSACO**

# Potential solution

- Unify protocols
- Endorse lateral approach
- Explore utility of finger thoracostomy
- Consider ultrasound



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TRAUMATIC ARREST



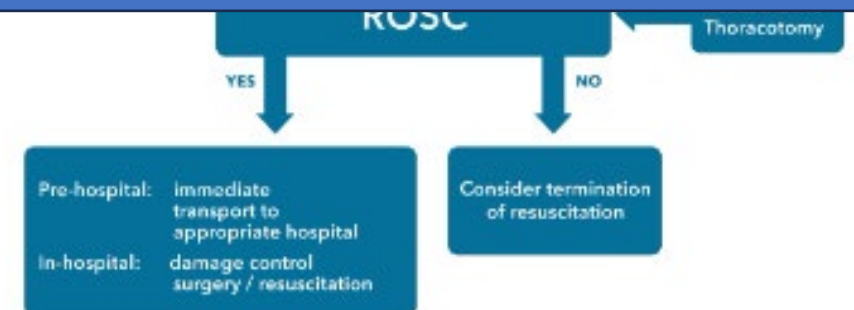
CIRCULATORY ARREST

Load and go  
Protocol based  
Compressions  
Minimization of epinephrine

De emphasize compressions  
Prioritize resuscitation based interventions  
Prevent further hemorrhage  
“reverse” causes



DE-EMPHASIZE COMPRESSIONS?!



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# Traumatic Cardiac Arrest: Who Are the Survivors?

David Lockey, FRCA, FIMC, RCS   • Kate Crewdson, MB, BS, BSc • Gareth Davies, FFAEM, FRCP

- Published in 2006
- 900+ patients out of hospital TCA
- 68 survivors, 7.5%
- No neurological outcomes

“Reversible” etiologies:

→ Pelvic injury

→ Massive pneumothorax / hemothorax

→ Pericardial tamponade

Asystole prior to EMS arrival → negligible survival  
Witnessed circulatory arrest → rapid tx /transport  
Role for ultrasound  
Influence of clinician judgement

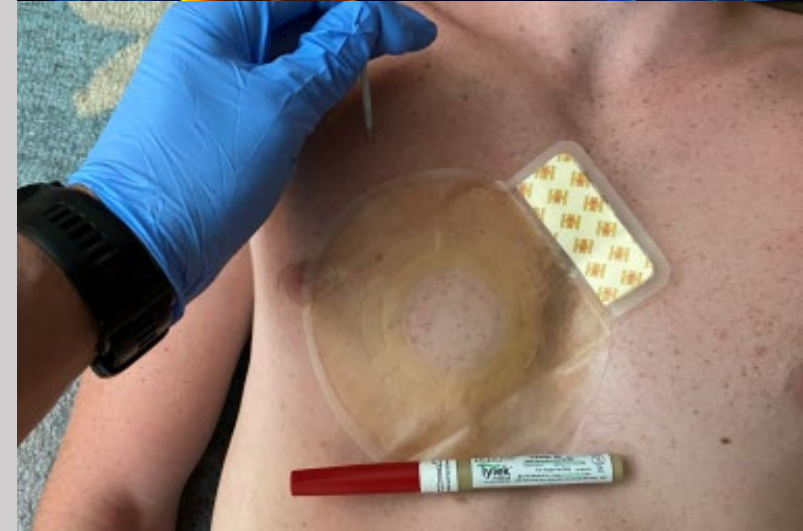


# Some More Trauma Dogma

Dustin J Calhoun, MD FAEMS  
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Cincinnati Fire Department  
Associate Professor  
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- Every tourniquet should be “high and tight”?
- Chest seals help prevent tension pneumothorax?
- Needle thoracostomy should only be done in the AAL?



Marc Gautreau, MD  
Cutting Edge Cricothyroidotomy



