DRT or DCR? Rethinking Post-Traumatic Circulatory Arrest in Austin!

Mark E. Escott, MD, MPH, FACEP, FAEMS, NRP

Medical Director

City of Austin-Travis County EMS System

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What's Your Plan??

Why bother??

- Survival rates: 0.77%-1.5%
- Some studies have recommended asystole as a contraindication in PTCA resuscitation





Should ALS be initiated??

- Journal of Acute Care Surgery 2013
- Retrospective cohort study 2006-2009
- Evaluated survival rates in Post-Traumatic Circulatory Arrest

Leis CC, et al. Traumatic Cardiac Arrest: Should Advance Life Support Be Initiated? <u>J Trauma</u> <u>Acute Care Surg.</u> 2013 Feb;74(2):634-8.

Should ALS be initiated??

- BLS and ALS units dispatched for PTCA + EMS Supervisor
- ALS includes:
 - Intubation
 - IV fluids
 - Medication administration
 - POC Ultrasound
 - POC lab testing
 - Chest tube
 - Pericardiocentesis



- 49.1% ROSC
- 6.6% CNR
- Children: 23% survival
- Adults: 5.7% survival
- Elderly: 3.7% survival





How much time do you have?

- Mean response time for survivors: 6.9 min
- Mean response time for non-survivors: 9.2 min
- AFTER 10 MINUTES from the time of the initial incident: zero survivors



What difference does the rhythm make?

- ROSC
- •VF: 90.9%
- PEA: 60.5%
- Asystole:40.2%

CNR

- •VF: 36.4%
- PEA: 7%
- Asystole: 2.7%







- Pit Crew CPR for Trauma
- TXA
- POC Ultrasound + PCT
- Whole Blood...Hopefully
- Chest Decompression....SOMETHING NEW!

Needle Thoracostomy



Simple Thoracostomy: Moving Beyond Needle Decompression in Traumatic Cardiac Arrest

Fri, Mar 28, 2014 By Mark E.A. Escott, MD, MPH, FACEP , Guy R. Gleisberg, MBA, BSEE, NREMT-B, EMS-I ,

Kasia Kimmel, MD , Andrew Karrer, LP [Andrew Karrer, LP] , Jared Cosper, BS, LP [Jared Cosper, BS, LP] , Brett J. Monroe, MD





Needle thoracostomy, by the anterior approach, is currently the preferred emergent EMS chest decompression procedure. Photo Kevin Nutt/Montgomery County Hospital District

Simple Thoracostomy

4th or 5th intercostal space midaxillary line





Indications

PTCA with known or suspected injury to the chest and/or abdomen





Contraindications

Any patient that has cardiac output, including hypotensive patients.

Last known alive > 10 minutes.





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