

OhioHealth Emergency Medical Services Podcast Series
May/June 2021 Episode: Trauma Surgeon Special

Objectives:

1. Review types of behavioral emergencies.
2. Discuss management approaches for behavioral emergencies.

Podcasters

- Dr. Drew Kalnow (Andrew.Kalnow@ohiohealth.com)
- Dr. Eric Cortez (Eric.Cortez@ohiohealth.com)
- Dr. Danni Schneider (Danni.Schneider@ohiohealth.com)
- Dr. Josh Hill

Podcast

- 24 YM – Unrestrained MVC with Chest and Abdominal Trauma
 - Blunt trauma is more common and more insidious
 - Everything is on the table
 - Central nervous system
 - Rib, lungs and cardiac trauma
 - Solid organs and hollow viscous
 - First steps in stabilization
 - IO's are fantastic if unable to obtain IV access
 - Tibial plateau is fine
 - Distal tibia is far from central vasculature
 - Humeral head is a good location
 - Consider location of injury
 - ABC's
 - The ABC's are time tested and it is for a reason
 - This is a great way to cognitively off load during stressful situations
 - Blunt trauma considerations
 - Search for source of hemorrhage
 - Resuscitate in a balanced manner
 - Medication effects
 - Antiplatelets
 - Bleeding from aspirin and clopidogrel is tough to control
 - Anticoagulants
 - Cardiovascular medications

- Thromboelastogram (TEG)
 - Functional test of blood clotting
 - Measures clot formation, strength and breakdown
 - Tells you what part of coagulation cascade is failing
 - Minimal impact within the first 30 minutes of hemorrhagic shock
 - Treatment focuses on empiric treatment with blood products
 - More impact when determining next steps in resuscitation
- Prehospital blood products and whole blood
 - 1:1:1 ratio of RBC, platelets and fresh frozen plasma
 - Whole blood is another option that is currently being explored by some trauma surgeons
 - Actively being researched
- Civilian vs. Military Research
 - Populations are much different so research cannot always be extrapolated
- TXA
 - History
 - Prevents clot breakdown; maintains clot; can help treat hyperfibrinolysis
 - Could be useful for trauma
 - CRASH-2 Study: patients who had or were at risk for significant bleeding
 - Mortality lower for patients who received TXA
 - Complications were the same between groups
 - Most of the people thought to be high risk for bleeding never received blood products; this created some concerns with the interpretation of the study
 - Since CRASH-2, the literature on TXA has been mixed.
 - Possible harm in certain patients
 - The truth is somewhere in the middle
 - TXA probably helps some people
 - Focus on good ABC care
 - TXA may help supplement clinical care in certain patient populations
 - Geography and transport times may influence decision
 - Use it early and in those that are severely injured