Today's Great Debate:

Should you Chest Compress Me of Keep it Hands Free?

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What does the Literature Say?

"Revisiting Traumatic Cardiac Arrest: Should CPR be Initiated?"

Conclusions:

- Survival after CPR among trauma patients continues to have dismal outcomes.
- ACLS advanced cardiac life support should be initiated regardless of the initial EKG rhythm.
- **Rapid response time and transport to the ED are of the utmost importance to survival.**

What does the Literature Say?

"Traumatic Arrest: The Unresolved Role of CPR"

Conclusions:

- Traumatic arrest rarely results in survival.
- **Rapidly reversible causes rather than CPR can result in successful ROSC.**
- ROSC may be achieved in trauma arrest beyond **20 minutes** of resuscitation.
- 24-hr survivorship beyond age 69 and survival to discharge beyond age 60 was not observed, suggesting resuscitation from TCA in ages > 60 is futile.

What does the Literature Say?

"An Evidence-Based Review of Prehospital Traumatic Cardiac Arrest"

Conclusions:

- Traumatic arrests involve **hemorrhagic shock**
- **Emphasis should be placed on procedural interventions and resuscitation VS. external cardiac compressions.**
- Additionally, external cardiac compressions on a patient with cardiac tamponade **may worsen** the cardiac output by increasing the intrapericardial pressure.

What does the Literature Say?

"Closed Chest Compressions Reduce Survival in an Animal Model of Hemorrhage-induced Traumatic Cardiac Arrest"

Conclusions:

- CCC were associated with **increased mortality and compromised hemodynamics** compared to intravenous fluid resuscitation.
- **Whole blood resuscitation was better than saline.**

If Any Signs Of Life, Initiate Rapid Transport

Obvious Death?


THE
GREY
AREA

Trauma Arrest =

No pulse + Not Breathing

- No Obvious Signs of Death
- PEA = some cardiac activity on monitor

So What Do We Do?

1. Open Airway/Adjuncts/BVM

2. Bilateral Chest Decompression

3. Reassess for pulse
    - Blunt trauma = stop
    - Penetrating trauma + PEA >40 + w/in 10 min of UNM = Transport

What If They Lose Pulses En Route?

- Massive Hemorrhage
  - Stop the bleeding/tourniquet/pelvic binder
- Hypoxia
  - Open the Airway, give O2
- Tension Pneumothorax
  - Decompress the chest
- Permissive Hypotension
  - Give IV fluids??
- Hypothermia
  - Get them warm

Trauma Arrest is a **LEAKY PIPE** problem, not a pump problem

- Basically unsurvivable at this point
  - Attempted to reverse everything we can
- Crew safety
  - Code 3 return poses danger to crew/community
- Trauma and hospital resources

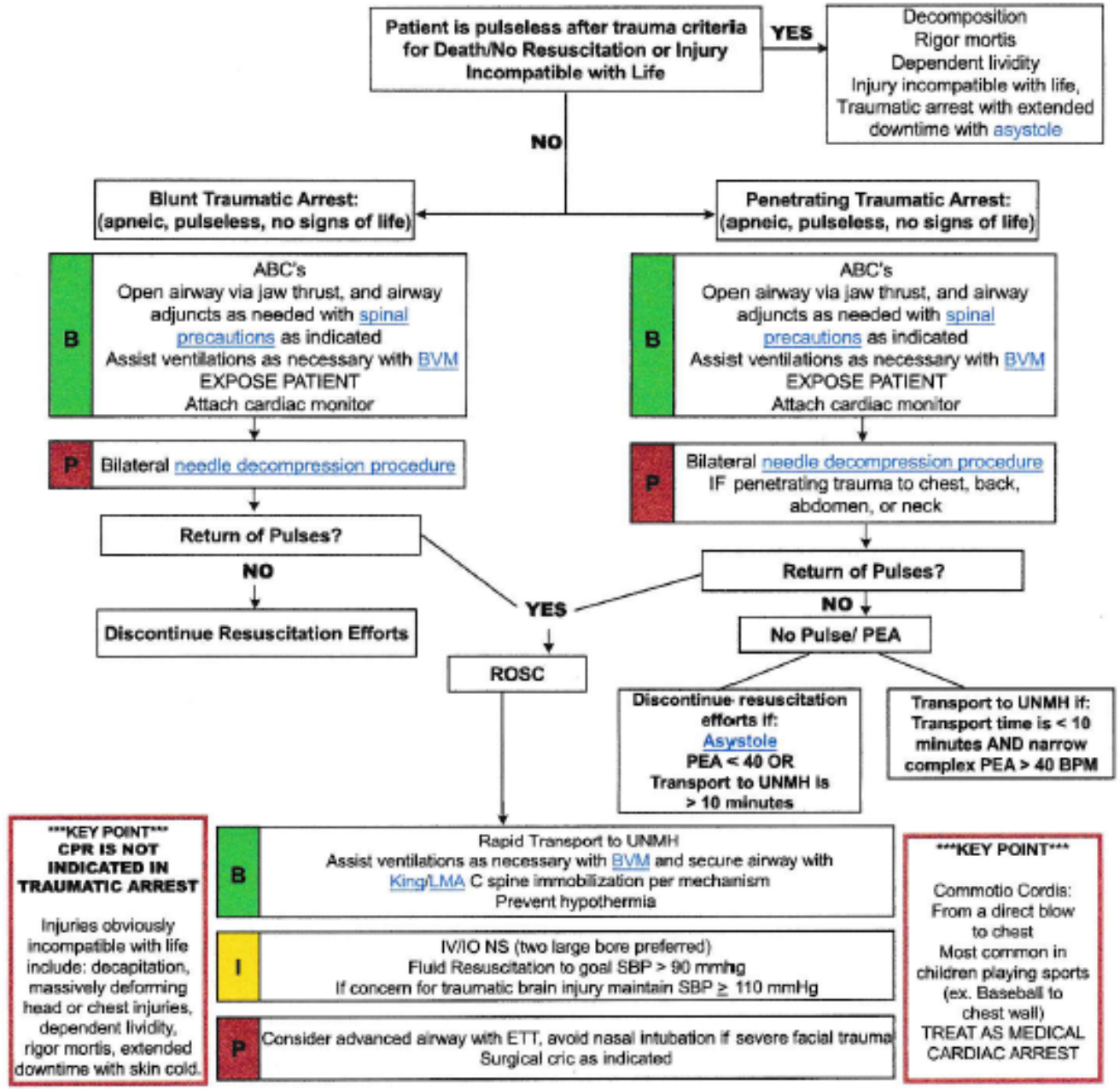
Exceptions

1. Possible Medical Etiology

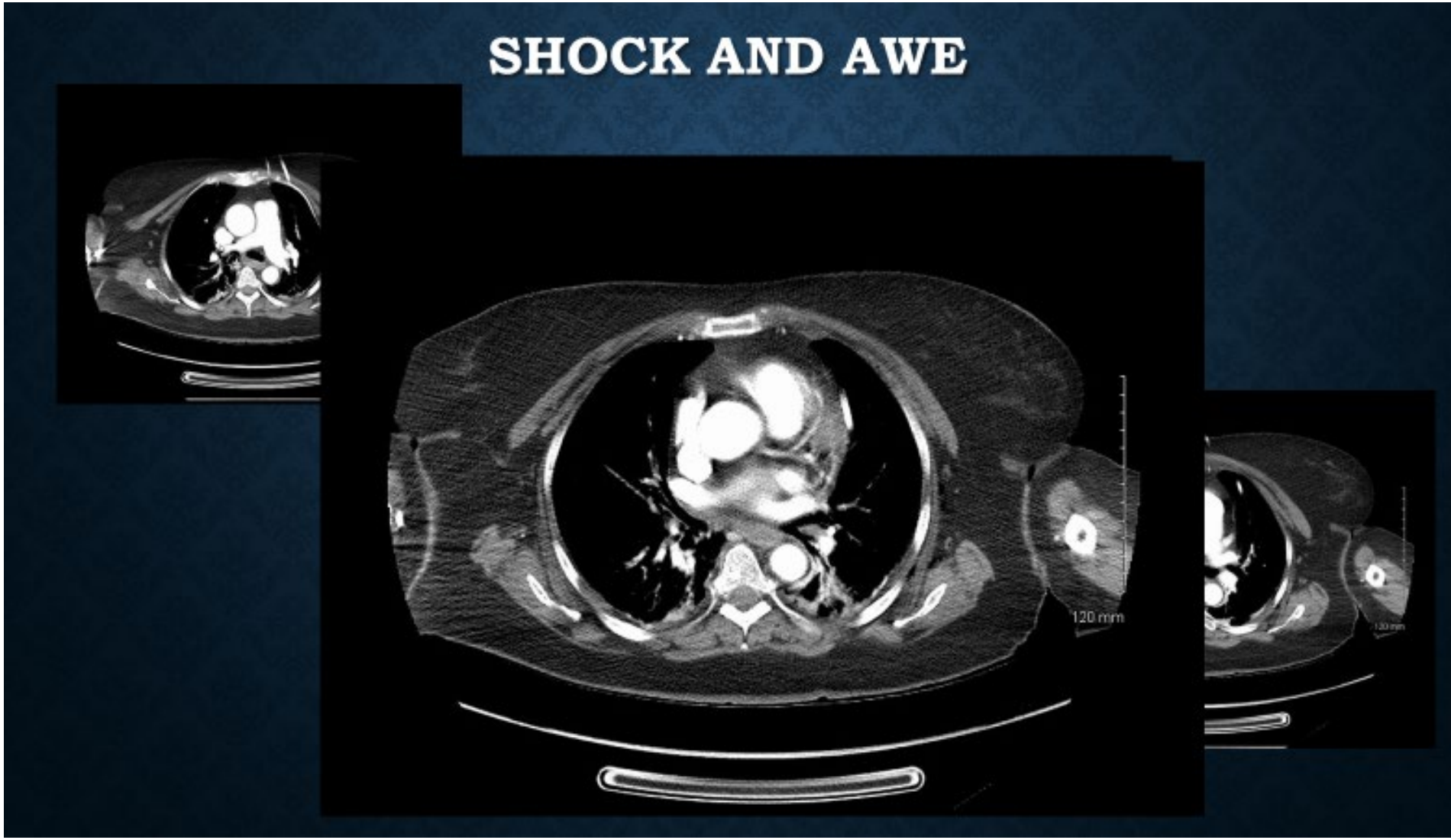
2. Scene dynamics and bystander concerns

Traumatic Arrest

Designation of Condition: A pulseless and apneic patient following a traumatic event without suspected underlying medical cause. If medical cause is suspected, follow cardiac arrest algorithm.



SHOCK AND AWE



New Orleans 2022 Trauma Blood Data

ED Dispo/Outcomes (All Administrations)			
	118	% of Total	N
Survive to Hospital Admission	Expired	31.4%	37
	Admit	28.0%	33
	TO OR	36.4%	43
	Discharge	3.4%	4
	Transfer	0.8%	1
All PHBA Administrations		69.2%	81

ED Dispo/Outcomes (non-arrest patients)			
	82	% of Total	N
Survive to Hospital Admission	Expired	3.7%	3
	Admit	39.0%	32
	TO OR	51.2%	42
	Discharge	4.9%	4
	Transfer	1.2%	1
Excluding Cardiac Arrests		96.3%	79

ED Dispo/Outcomes (Cardiac Arrest patients)			
	36	% of Total	N
Survive to Hospital Admission	Expired	94.4%	34
	Admit	2.8%	1
	TO OR	2.8%	1
	Discharge	0.0%	0
	Transfer	0.0%	0
for Pre-hospital cardiac arrests		5.6%	2

Hospital Dispo/Outcomes			
	77	% of Total	N
Survive to Discharge	Home	61.0%	47
	2nd Inpt Facility	23.4%	18
	Expired	11.7%	9
	Hospice	1.3%	1
	Hospitalized	1.3%	1
	AMA	1.3%	1
Following admission to hospital		88.3%	68