

Mock Trial



**ROCKY MOUNTAIN RURAL TRAUMA SYMPOSIUM
FRIDAY, SEPTEMBER 12, 2014**

The Story



- A 55 year old male crashed on his ATV
- He was cared for by an ALS EMS unit, ED at the hospital in that area, flight team and finally at the Regional Trauma Center (ACS Level II)
- Patient suffered chest, abdominal and orthopedic trauma
- Patient had extensive list of co-morbidities
- Patient died ~13 hours after the event occurred

The Lawsuit



- The EMS agency that transported the patient to the first facility, the MD at the first facility and that facility itself along with the trauma surgeon and the second facility have all been named in a wrongful death suit
- The family is asking for millions in damages for wrongful death
- In our mock trial, “representatives” of these groups will be questioned here by real plaintiff and defense attorneys and a real judge will oversee the proceeding

Our Team



- Judge: Justin Bartels
- Attorney for the prosecution: Jennifer Clark
- Attorney for the defense: W. Adam Duerk
- Expert witness for the prosecution: Dr. Brad Pickhardt
- Expert witness for the defense: Dr. Kevin Eichhorn

Disclaimer



Nothing about this scenario is real

It was made up

It's fake

...but it could have happened

Event – Sometime around noon



55 y.o. male unhelmeted ATV rider missed a curve and plunged down an embankment – FS road 20 miles from Community Trauma Facility (intermittent trauma surgery and orthopedic surgery coverage, no neurosurgical coverage...no trauma or orthopedic surgeon on call on this date) - Hospital is about an hour by ground from the nearest Level II Center

Friends called 911 by cell phone then loaded the patient onto one of their ATVs and took him to the nearest road, now about 15 miles from the hospital where they are met by an ALS ground crew

Chief complaints: Chest wall pain and closed right femur fracture

It's early November – time of rendezvous is 1300 – temperature is 25 degrees with light snow and steady wind

EMS



P 120, R 28, BP unattainable because of multiple layers of damp clothing - radial pulse noted with skin cold and damp to the touch, GCS 14 (confused regarding event)

Obvious injuries:

- Scalp laceration
- Right-sided chest wall pain
- Closed right femur and left tib/fib fractures

O2 applied via non-rebreather mask

Clothes cut so left arm could be exposed – BP taken at this time
92/60

IV established on 4th attempt – LR wide open – Fentanyl 50 mcg

EMS



No damp clothes removed, no passive warming measures initiated

Paramedic charts: “Confusion could be from head injury but could also be from alcohol because patient has strong odor of alcohol and has obviously been drinking.”

Sager applied to right leg - Splint applied to left lower leg

Scene time 22 minutes

Code 3 to hospital at 1322, no call for flight (might have been able to fly)

First Facility



Team led by Family Practice MD who has covered shifts in the ED for ~10 years, has not taken ATLS

1340: Arrive - P 124, R 24, BP 94/52, GCS 14, temp not recorded

1350: Second peripheral IV started - Portable CXR shows multiple fractured ribs and small pneumothorax right side - O2 per NRB with sat 92%

Chest tube placed, no blood return

Clothes removed, no record of Bair Hugger or warming lights

1430: To CT for head/neck/chest/abdomen/pelvis (no contrast used)

1500: To X-ray for films of both upper and lower legs

P 128, R 28, BP 86/50

First Facility



Injuries identified:

- Right-sided rib fxs 3-8 (no flail segment)
- Underlying small pneumothorax
- Liver laceration
- Right-sided pubic rami fractures
- Closed fracture right femur
- Closed fracture left tib/fib

First Facility



1540: Return to ED - Call for helicopter transport to Level II Trauma Center

No significant change in vitals

Patient's wife arrives, says he has high blood pressure, Type II diabetes and "heart problems" for which he takes a number of medications including Coumadin

1620: Flight team arrives

Total crystalloid given: 4 liters

1640: Flight team departs (3 hours after pt arrival)

P 132, R 24, BP 90/50, GCS 14 – No changes during flight

Second Facility



1710: Arrive - P 140, R 28, BP 90/54, GCS 13, Temp 95.4F (35.2C)

Warming lights/Bair Hugger employed

Lower level trauma team activation called

1730: To CT for chest/abdomen/pelvis with contrast

Determine liver laceration is Grade 4-5 with active extravasation

1800: Trauma surgeon, orthopedic surgeon and OR team called,
arrive at 1830

INR 4.2

Vitamin K 10 mg IV given (no PCC or FFP)

Given 1 liter crystalloid, total now 5

1900: To OR, 7 hours post-event

Second Facility



- In OR for 3 hours for:
 - Exploratory laparotomy with packing of liver - VAC
 - IM rodding right femur fracture - Stabilization left tib/fib
 - Placement central and arterial lines
 - No significant change in vitals
 - pH 7.30, HCO₃ 16, BE -10.4
 - 2 units PRBC and 2 FFP given in OR along with another 2 liters crystalloid (total 7)
 - No repeat INR
 - Exit vitals: P 144, BP 90/60, temp 96.4F (35.8C)

Second Facility



2200: Arrive ICU - P 144, BP 82/50, Temp 95.0F (35.0C)

VAC output modest

2300: P 140, BP 74/50 - 2L crystalloid (total 9) and 2 PRBC/FFP given (total 4)

pH 7.24, HCO₃ 14, BE -14.4

2240: 2 more L crystalloid (total 11), 2 units PRBC/FFP given (total 6) - VAC output increasing

2345: P 152, BP 70/40, Temp 94.2F (34.6C)

Return to OR for re-packing

0130: Return to ICU - P 150, BP 70/40

0200: Cardiac arrest, expired

Timeline



	Since last event	Total since event
1200: Event		
1300: Rendezvous/EMS	60 min	60 min
1322: Transport 1 st facility	22 min	1 hr, 22 min
1340: Arrive 1 st facility	18 min	1 hr, 40 min
1430: To CT	50 min	2 hr, 30 min
1500: To X-ray	30 min	3 hr
1540: Return ED/Call helo	40 min	3 hr, 40 min
1620: Flight team arrives	40 min	4 hr, 20 min
1640: Flight team departs	20 min	4 hr, 40 min
1710: Arrive Level II	30 min	5 hr, 10 min

Timeline



	Since last event	Total since event
1730: To CT	20 min	5 hr, 30 min
1800: Surgeons called	30 min	6 hr
1830: To arrive	30 min	6 hr, 30 min
1900: To OR	30 min	7 hr
2200: To ICU	3 hr	10 hr
2340: Back to OR	1 hr, 40 min	11 hr, 40 min
0130: Back to ICU	1 hr, 50 min	13 hr, 30 min
0200: Expired/efforts ceased	30 min	14 hr



The Case

Wrongful death due to...EMS:



- Delayed scene time
- Not calling for flight
- Lack of warming measures
- Charting “drunk” → prejudicial care

Wrongful death due to...1st facility:



- Delayed call for transport
- MD never taking ATLS
- No warming measures documented
- No contrast for chest/abdomen/pelvis CT
- Going to X-ray
- Not immediately dealing with Coumadin (Vitamin K)
- Giving 4 liters crystalloid, no blood products

Wrongful death due to...2nd facility:



- Calling lower level activation → delay to OR
- No FAST
- Insufficient efforts to reverse Coumadin/no repeat INR
- Failure to do damage control surgery → too long in OR
- Insufficient warming measures
- Failure to activate MTP, giving 7 more liters crystalloid (total 11) and only 6 PRBC/FFP
- Presumed failure to stop the bleeding
- Failure to utilize angiography/hepatic caval injury

The Defense...EMS



- Did not call helicopter because of safety/weather considerations
- Field warming methods of little benefit
- Wanted to get IV because patient was borderline hypotensive
- Things take longer in the field
- EMS takes care of intoxicated patients frequently without prejudice

The Defense...1st facility



- Wanted to know the injuries before calling to make sure transport necessary and so receiving hospital could be adequately informed/prepared
- MD experienced, has taken care of lots of trauma patients
- Warming measures were utilized, just not documented
- Once they learned of Coumadin, flight team already there and did not want to delay transport
- Takes a long time to get blood products, was afraid patient would be gone by the time they were ready to be administered

The Defense...2nd facility



- Hypotension was intermittent, did not warrant highest level activation
- Gave FFP, admit they should have drawn a second INR but continued to give FFP so not a big issue
- Warming measures were adequate, patient just couldn't be warmed because of shock
- Patient was given blood products, did not meet MTP protocol criteria upon admission
- Angiography might not have been beneficial