

Damage Control Ortho Working with the General Surgeons

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Hughston Trauma at Ft Walton Beach

Objectives

- Review ATLS priorities for polytrauma patients
- Discuss the role of the Orthopaedic consultant in initial management of polytrauma patients
- List strategies for success:
 - Timeliness of consult
 - Efficiency and accuracy of evaluation
 - Document early exam
 - Supervise splintage
 - Set priority list

ATLS Priorities

- Airway
- Breathing
- Circulation
- Neuro (D)

- Extremities



Role of the Orthopaedic Consultant

- Assist in triage
 - Provisional diagnosis
 - Natural hx (early)
 - Abx
 - Suggest further initial treatments:
 - Decontaminate wounds
 - Reduce/splint
 - Direct type and timing of further dx studies
 - Plain films
 - CT
 - MRI



Be an Early Presence

- ACS: 30 min time window
- Break out of a case?
- How far away do you live:
 - Traffic?
 - Seasonal issues
- Aim for the "sweet spot": between intake and clearing the Trauma bay



Wait Your Turn

- ABCD.....E
- Lots to take in while you are waiting:
 - How sick?
 - Other issues?
 - Vitals/class. of blood loss
 - Chest OK?
 - Spontaneous extremity motion



Your Exam: Standardize

- Obvious injuries: Get control fast
- Then, Head to toe
- Anticipate distractions:
 - Remember where you were
 - Always the same sequence
- Joint, shaft, soft tissues, joint
- Note contusions and tenderness for later



30% Miss Rate

- DeLong et al
- You **HAVE** missed something.
- Admit it to the team, patient, and family
- Go back and look again, later
- And again
- (DeLong: 7 mo later)



Compartments!!!

- Tissue response to trauma is dynamic:
 - Crystalloid fluid resuscitation
 - Hypotension
 - Extremity contusion (bleeding)
 - Central pressors
- Anticipate continued swelling
- Maintain ready access to the tissues



Document

- If the exam is going to change,
 - make certain the next person knows what you saw...
 - Clear, concise description
 - Measurements?
- Most important in:
 - Drunk
 - Intubated
 - Cognitive challenged patients



Reductions and Splintage

- Anticipate the patient will be on hold for 24 hrs
- Reduce
- Splint
- Reduce analgesic needs
- Control soft tissue swelling
- Prevent further injury



Priority List

- Patient factors:
 - How sick
 - Other injuries
- Facility factors:
 - Equipment
 - Staffing
 - OR personnel
 - Anesthesia
 - Xray
- Surgeon factors



Honesty/Humility

- Accurate predictions:
 - Case duration
 - Blood loss
- Organize wish list:
 - Pelvis
 - Wounds
 - Ex-fix/pinning
 - Long bones
 - Periarticular work



Strategies for Success

- Be an early presence
- Wait your turn
- Get a sequence, don't deviate from it
- Start at the top, mash on everything
- 30 % miss rate... (remember that)
- Compartments....
Compartments....
Compartments!
 - Release early and often
- Document the exam:
 - It is going to change...
- Reduce and splint
 - Not best left to the ER
 - Post reduction films
- Priority list:
 - Patient factors
 - Facility factors
 - Surgeon factors
- Be Honest:
 - How long/fast can you be? What is the least amount of equipment you will need?

Summary

- Multidisciplinary team
 - Includes Ortho
- Early, accurate assessment
- Thorough but incomplete 1st exam
- Wish list for fixation
- Reduce and splint early
- Document neuro/soft tissues
- Book procedures that won't kill the patient


