Austere Hemorrhage Management
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Why

- Because bad things can happen in bad places.
- Wilderness Adventures / Maritime settings
- Military / Mass Casualty
- Accidents / Attacks
- Remote clinical settings
- The best transfusion is keeping the pt blood in his body

Extremity trauma

- Amenable to pressure dressings and TQ
- Retrograde circulation
- 2 bones in forearm and lower leg.
Trunk and head trauma

- Not able to use a TQ
- Pressure dressings can be difficult to maintain
- Potential for internal bleeding, respiratory or GI issues
- Don't be ‘that guy’ that packs 4 rolls of kerlex into a lung.

Tools in the tool box

- The fine art of Pressure dressings
  - look, feel, use the bone.
  - Pyramid, mass, wrap - do not make a venous cuff
  - TQ high and tight vs precise, possibly more than one
  - Hemostatic agents
  - TXA and FWB
  - Repeat physical exam frequently

Improvised tools

- Knit fabrics vs woven - t shirt
- Windlass vs Wrap vs 2:1
- Improvised TQ options
- Hartford, TCCC, say I'm wrong. Why?
Difficult dressings

- Inguinal
- Armpit
- Neck/head

Meds

- Acetaminophen
- Meloxicam
- Narcotics/ketamine increases TQ compliance
- TXA

Prolonged care

- TQ removal protocol
- Pt, environment and medic all stable
- 30 min - 2 hrs is the goal
- Improvised wound care
- Irrigation
- Wet to dry
Discussion

We don’t rise to the level of our expectations, we fall to the level of our training. — Archilochos

Knowledge weighs nothing in a rucksack. Improvisation is not the primary plan but when you need to improvise, having a plan is better than not having a plan.

Otherwise,

All bleeding stops eventually