

Special Operations Medical Association



Pain Management in Prehospital Setting 2023

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DISCLAIMER

- **The opinions and/or assertions contained herein are the private views of the author and are not to be construed as official or as reflecting the view of the US Army, United States Special Operations Command (SOCOM), the Department of Defense (DoD), or the Special Operations Medical Association (SOMA).**
- **Current President of The SOMA.**
- **Financial Disclosures: North American Rescue as part of their innovation team focusing on functional and psychological application of pre-hospital practices.**



Overview

- **Mitigating Expectations**
- **U.S. Pain Guidelines**
- **Do No Harm – Know your Limit of Advance**



Mitigating Expectations & Outcomes





Mitigating Expectations & Outcomes



Leg Fx



Know your Limit of Advance!

Keep Patient Alive

Sustain Physiology

Analgesia

Patient
Safety

Deep
Sedation



U.S. Military Basic Guidelines

- **TCCC Non-Medical First Responders** should provide analgesia on the battlefield achieved by using:
 - Mild to Moderate Pain
 - Casualty is still able to fight
 - TCCC Combat Wound Medication Pack (CWMP)
 - Acetaminophen – 500 mg tablet, 2 PO every 8 hours
 - Meloxicam – 15 mg PO once a day

- **TCCC Medical Personnel**
 - Option 1:
 - Mild to Moderate Pain
 - Casualty is still able to fight
 - TCCC Combat Wound Medication Pack (CWMP)
 - Acetaminophen – 500 mg tablet, 2 PO every 8 hours
 - Meloxicam – 15 mg PO once a day
 - Option 2:
 - Mild to Moderate Pain
 - Casualty IS NOT in shock or respiratory distress AND Casualty IS NOT at significant risk of developing either condition.
 - Oral transmucosal fentanyl citrate (OTFC) 800 µg
 - May repeat once more after 15 minutes if pain uncontrolled by first.

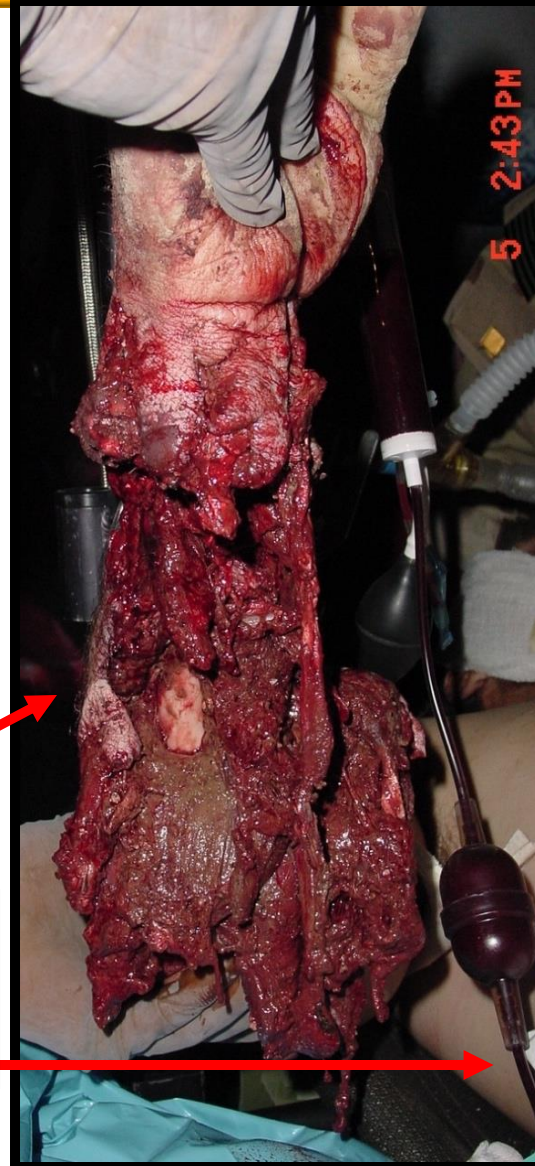
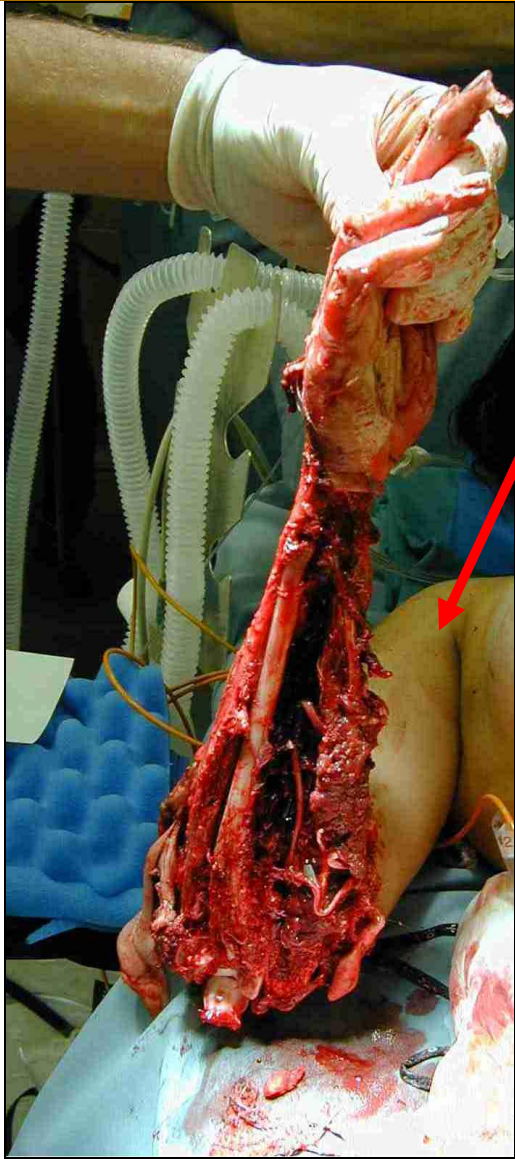
Combat Pill Pack?

Ben Taub Jan 2000

16 y/o Female –R above the knee near amputation, **R forearm near amputation**

Afghanistan Dec 5, 2001

Mike M. – L chest/mandible/neck shrapnel, L open humerus fracture, L leg shrapnel, **R forearm near amputation**





Mike 2021





U.S. Military Basic Guidelines

■ TCCC Combat Paramedics or Providers:

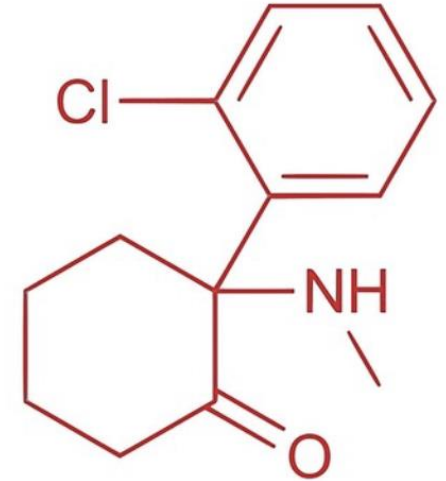
– Option 2:

■ Mild to Moderate

- Fentanyl 50 mcg IV/IO (0.5-1 mcg/kg)
 - May repeat q 30 min
- Fentanyl 100 mcg IN
 - May repeat q 30 min

– Option 3:

- Moderate to Severe Pain
- Casualty **IS** in hemorrhagic shock or respiratory distress OR
- Casualty **IS** at significant risk of developing either condition:
 - **Ketamine** 20-30 mg (or 0.2 - 0.3 mg/kg) slow IV or IO push
 - Repeat doses q 20min prn for IV or IO
 - End points: Control of pain or development of nystagmus (rhythmic back-and-forth movement of the eyes).
 - Ketamine 50-100 mg (or 0.5-1 mg/kg) IM or IN
 - Repeat doses q20-30 min prn for IM or IN



KETAMINE

a hell of
a drug



U.S. Military Basic Guidelines

■ TCCC Combat Paramedics or Providers:

– Option 4:

- **Sedation required:** significant severe injuries requiring dissociation for patient safety or mission success or when a casualty requires an invasive procedure; must be prepared to secure the airway:
 - **Ketamine** 1-2 mg/kg slow IV/IO push initial dose
 - Endpoints: procedural (dissociative) anesthesia
 - **Ketamine** 300 mg IM (or 2-3 mg/kg IM) initial dose
 - Endpoints: procedural (dissociative) anesthesia

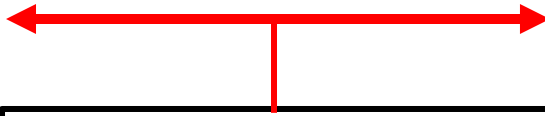
If an emergence phenomenon occurs, consider giving 0.5-2 mg IV/IO midazolam.



****If continued dissociation is required, move to the Prolonged Casualty Care (PCC) analgesia and sedation guidelines.***

- If longer duration analgesia is required:
 - **Ketamine** slow IV/IO infusion 0.3 mg/kg in 100 ml 0.9% sodium chloride over 5-15 minutes.
 - Repeat doses q45min prn for IV or IO
 - End points: Control of pain or development of nystagmus (rhythmic back-and-forth movement of the eyes).

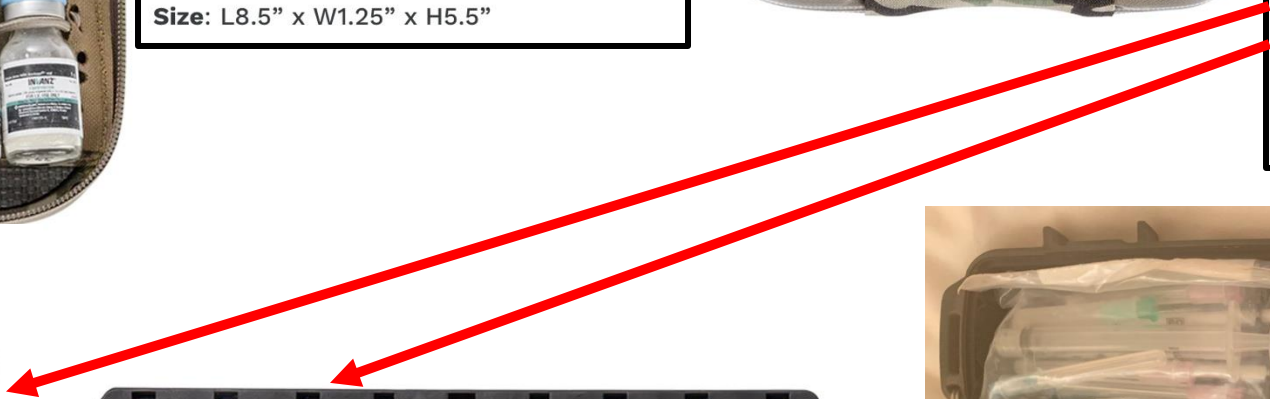
Types of Pre-Hospital Medication Box/ Cases



- TEGRIS™ reinforcement prevents crush.
 - Customizable bungee panel
 - Internal organization pockets
- Size:** L8.5" x W1.25" x H5.5"



- Lid retention for syringes
 - Hard case design with tether attachment point
 - Velcro dots for vial retention
 - Loop field for vial placement
 - External hook tape for kit integration
- Size:** L8.5" x W1.5" x H3"





Types of Pre-Hospital Medication Box/ Cases

SPECS

- SEL#: O9ME-01-BAGM
- Water resistant (3 meters) and crush proof
- Stainless steel (non-rusting) hardware
- Automatic Pressure Equalization Valve
- Dual lockable tabs measuring 0.165 in. diameter by each latch to securely lock contents of case
- Inside top, bottom and sides lined with loop (MILSPEC AA55126A Type II)
- Hook discs (0.5 in.) 100 ea per sheet (MILSPEC AA55126A Type II)
- Additional Hook Discs can be purchased

NOTE: Medications are not included

Dimensions:

- Exterior: L 7.95 in. x W 5.1 in. x D 2.14 in.
- Interior: L 6.45 in. x W 3.87 in. x D 1.75 in.
- Weight: 10.5 oz



Philippines 2007

<18 hours post injury

Three weeks post injury





Blast injury, fell off two story roof.

Dive injury – boat propeller.

TQ placed prior to recovery into boat.





Questions

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