

EM Basic – Tactical Combat Casualty Care (TCCC)

AKA “Care Under Fire”

AKA “Care in the immediately unsafe scene”

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Concepts:

Tactical scenes (overall command) is police or combatant chain of command

Good medicine may be bad tactics, bad tactics cause more casualties.

Right intervention at the right time

Relative scene safety – phases of care

Resource constrained environment – most good for the most people

Military vs civilian – battlefield vs. active shooter vs standoff, SABC vs no medical training at all

What causes death?

66% of preventable deaths were extremity hemorrhage

30 % Tension pneumothorax

~3% airway

Selective immobilization – blunt(incl blast) vs penetrating

Care of the enemy combatant

Same standard of care

Disarmed, swept, with a guard

Definitions:

TCCC (TC3, T-Triple-C) – joint military/civilian curriculum,
NAEMT/PHTLS

Combine good tactics with best possible medicine

Phases of care:

Care under fire (misnomer)

Tactical Field Care

TACEVAC care

Care Under Fire “Care in the imminently unsafe scene”:

Step 1: Fire superiority on the objective

NO medical care can be rendered when receiving effective enemy fire. Don't get dead.

Step 2: Clear the battlefield

- a) Casualty collection point (CCP)- defined by TACTICAL COMMAND
 - a. Don't open your aid bag anywhere else
- b) Voice triage- call out to injured
 - a. Walking wounded triaged to SABC in military, “once over” by secondary medic in civilian
 - b. Those who can wave but not walk will probably survive at least another 60 seconds, but likely require intervention of some sort.
- c) Physical triage
 - a. START protocol, consider deviation only if very limited number of patients

Step 3: Immediate life saving interventions

- a) Tourniquet, high/hasty over clothes
- b) Defer any other management

Step 4: Move to CCP (COVER, not merely concealment)

Tactical Field Care “Care in the potentially unsafe scene” – what was a safe place may become unsafe:

MARCH algorithm vs ABCs- MARCH is the better approach, especially with blast or penetrating injuries

Massive hemorrhage, **A**irway, **R**espirations, **C**ardiac, **H**ead injury/**H**ypothermia

Primary survey, immediate intervention, reassess then delayed intervention

- 1) **M**assive hemorrhage
 - a. Reassess tourniquets
 - b. Blood sweep (cut clothes, remove armor)
 - i. DOWNSIDE INJURY
 - ii. Strap cutter vs. scissors
 - iii. Disarm
 - c. Pack junctional regions PRN
 - i. Specific techniques beyond scope
- 2) **A**irway
 - a. Patent, not patent, THREATENED
 - i. No intervention, immediate intervention, potential delayed intervention
 - b. Biggest bang for least time
 - i. Nasal trumpet
 - ii. Supraglottic
 - iii. ET tube
 - iv. Cric
- 3) **R**espirations
 - a. Open PTx
 - i. Chest seal, ideally vented
 - b. Evidence of TPTx
 - i. Classic signs are late
 - ii. Long needles
 - c. Flail segments
- 4) **C**ardiac (pulses)
 - a. Pulse correlation to BP has been debunked, but radial pulse generally = brain perfusion
 - b. Not everyone needs fluids.
- 5) **H**ead injury/**H**ypothermia
 - a. DISARM any confused/altered/unresponsive patient

- i. GENTLY – the weapon is their friend. Enlist another trusted friend
 - b. Avoid further injury
 - i. Head up if possible
 - ii. No tight C-collar
 - iii. Ensure open airway/respirations
 - c. C-spine immobilization PRN (large blast/ blunt injury, NOT penetrating and/or GLF)
 - d. Avoid hypothermia
 - i. HPMK
 - ii. Blankets
 - iii. Warm vehicle
- 6) Fine tune interventions
 - a. Deliberate tourniquet (taped, timed)
 - b. Analgesics
 - c. Antibiotics
 - d. Delayed airway intervention
- 7) REASSESS

TACEVAC Care (care while leaving the scene)

- 1) Generally more equipment available
 - a. Monitors
 - b. Oxygen
 - c. Drugs
- 2) Reassess all interventions (tourniquets, chest movement, pulse)
 - a. Apply monitors
 - b. Fine tune interventions
 - c. Enroute critical care

Review:

- 1) Right intervention at the right tactical time
- 2) Death from bleeding, PTx, Airway
- 3) Fire superiority first
- 4) MARCH
- 5) Selective immobilization
- 6) Be prepared for phase changes

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