

Tactical EMS

South Cook County EMS

September, 2021

Site Code: 070400E1222

Introduction

- The three goals of Tactical EMS:
 - 1. Save **preventable deaths**
 - 2. Prevent additional casualties
 - 3. Complete the mission

Introduction

- This session will help to show correlation between the care that a combat medic provides and the care that a civilian medic may provide in a “tactical” situation:
 - perform the *correct intervention* at the *correct time* in the continuum of Tactical Care

Tactical Deaths

- KIA: 31% Penetrating head trauma
- KIA: 25% Surgically uncorrectable torso trauma
- KIA: 10% Potentially surgically correctable trauma
- KIA: 9% **Hemorrhage** from extremity wounds
- KIA: 7% Mutilating blast trauma
- KIA: 5% **Tension pneumothorax**
- KIA: 1% **Airway problems**
- 12% Mostly from infections and complications of shock

KIA (Killed in Action)

Preventable Causes Of Tactical Death

- 60% **Hemorrhage** from extremity wounds
 - 33% **Tension pneumothorax**
 - 6% **Airway obstruction** e.g., maxillofacial trauma
- * Data is extrapolated from Vietnam to present day Iraq and Afghanistan*

STAGES OF CARE:

3 Distinct Phases

- Care Under Fire
- Tactical Field Care
- Tactical Casualty Evacuation Care (TACEVAC)

Care Under Fire

- “Care under fire” is the care rendered by the Tactical Medic or (paramedic) at the scene of the injury while still under hostile fire or a hostile situation.
- Available medical equipment is limited to that carried by the medic or first responder in his/her aid bag

Tactical Field Care

- “Tactical Field Care” is the care rendered by the medic once no longer under hostile fire or in a hostile situation.
- Also applies to situations in which an injury has occurred, but there has been no hostile fire
- Available medical equipment still limited to that carried into the field by medical personnel
- Time to evacuation may vary considerably

TACTICAL EVAC (Transport)

- “Tactical Evacuation” is the care rendered once the casualty has been picked up by evacuation vehicles (ambulances)
- Additional medical personnel and equipment may have been pre-staged and available at this stage of casualty management

Care Under Fire

- No attention to airway at this point because of need to move casualty to cover quickly
- Control of **hemorrhage** is essential since injury to a major vessel can result in hypovolemic shock in a short time frame
- Remember the “Average” person can exsanguinate in 3-5 minutes with a major vessel injury i.e. Femoral Artery Disruption

Massive Hemorrhage



Care Under Fire

- **Hemorrhage** from extremities is the 1st leading cause of preventable tactical deaths
- Prompt use of tourniquets to **stop the bleeding** may be life-saving in this phase

Tourniquets



Care Under Fire

- All personnel responding in High Threat situations should have a suitable tourniquet readily available and be trained in its use
- The tourniquet should be placed as high up on the extremity as possible, ignoring the clothing

Combat Application Tourniquet (CAT)



WINDLASS

OMNI TAPE BAND

WINDLASS STRAP

Care Under Fire

- Conventional methods may not be available for movement of patients
- Consider alternate methods to move patients such as a SKED/Half SKED
- Smoke, shields and vehicles may act as screens to assist in casualty movement



Tactical Field Care

- Reduced level of hazard from hostile fire or hostile situations
- Increased time to provide care
- Available time to render care may vary considerably

Tactical Field Care

- In some cases, tactical field care may consist of rapid treatment of wounds with the expectation of a re-engagement of hostilities
- In some circumstances there may be ample time to render whatever care is available in the field
- The time of evacuation (from the scene) may be quite variable from minutes to hours

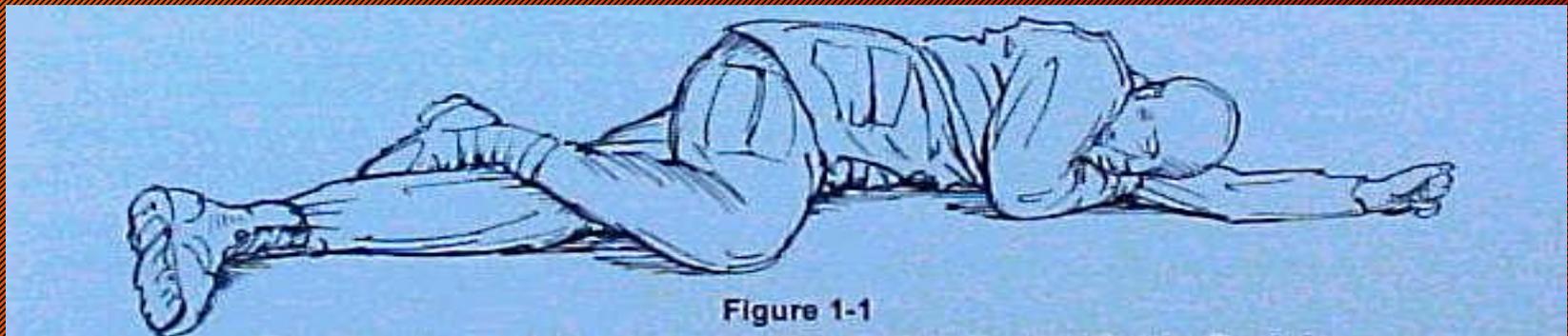
Tactical Field Care

- On going assessment in this phase is: A.B.C
 - Airway
 - Breathing
 - Circulation



Tactical Field Care: Airway

- Open the airway with a chin-lift
- If unconscious and spontaneously breathing, insert a nasopharyngeal airway
- Place the patient in the recovery position



Nasopharyngeal Airway



Tactical Field Care: Breathing

- Traumatic chest wall injuries should be closed quickly with an occlusive dressing without regard to venting one side of the dressing
- Place the patient in the sitting position or on affected side.



Tactical Field Care: Breathing

- Progressive respiratory distress in the presence of unilateral penetrating chest trauma should be considered **tension pneumothorax**
- **Tension pneumothorax** is the 2nd leading cause of preventable death on the battlefield
- Cannot rely on typical signs such as shifting trachea (late sign)
- Needle chest decompression is life-saving
(14 gauge 3.25 inch catheter)

Needle Chest Decompression



Tactical Field Care: Circulation

- Any bleeding site not previously controlled should now be aggressively addressed.
- Only the absolute minimum of clothing should be removed, although a thorough search for additional injuries must be performed

Tactical Field Care: Circulation

- Once the tactical situation permits, a new tourniquet can be applied 2-3 inches above wound. Distal pulse should be checked, If present, tighten tourniquet until distal pulse is absent and/or bleeding controlled.
- Initiate IV access



Hemostatic Dressing

- Apply directly to bleeding site and hold in place 2 minutes
- If dressing is not effective in stopping bleeding after 4 minutes, remove original and apply a new dressing
- Additional dressings should not be applied over ineffective dressing
- Apply a trauma dressing/bandage to secure hemostatic dressing in place
- If bleeding controlled, do not remove dressing

Tactical Field Care: IV fluids

- **FIRST, STOP THE BLEEDING!**
- IV access should be obtained using a single 18-gauge catheter because of the ease of starting. Rapidly consider I/O access
- IV fluids be administered in amounts enough to maintain systolic B/P between 70-80 mmHg with 0.9 NS
- A saline lock may be used to control IV access in absence of IV fluids
- Ensure IV is not started distal to a significant wound

Tactical Field Care: Additional injuries

- Splint fractures as circumstances allow while verifying pulse and prepare for evacuation
- Continually reevaluate patients for changes in condition while maintaining situational awareness
- Consider Emergency Airway

Tactical EVAC



Tactical EVAC

- At some point in the operation the patient will be evacuated (transported)
- Time to evacuation may be quite variable from minutes to hours
- The medic may be among the casualties or otherwise debilitated
- A MASS CASUALTY EVENT may exceed the capabilities of the medics

Summary

- There are three categories of casualties on the battlefield (tactical situation):
 1. Patients who will live regardless
 2. Patients who will die regardless
 3. Patients who will die from **preventable** deaths *unless* proper life-saving steps are taken immediately (60% Hemorrhage, 33% Tension Pneumo and 6% Airway Obstruction
 - This is the group MEDICS can help the most.