S

aving lives and eliminating preventable deaths among US combat casualties is the primary objective of the Department of Defense’s combat casualty care efforts. Because the vast majority of combat fatalities occur before the casualty ever reaches a medical treatment facility and the care of a surgeon, optimizing the training and delivery of Tactical Combat Casualty Care (TCCC)—the US Military’s remarkably successful battlefield trauma care program—is paramount in reducing preventable deaths. Military units that have trained all of their members on TCCC have documented the lowest incidence of preventable deaths among their combat casualties in the history of modern warfare.

Despite the critical importance of TCCC, its adoption and implementation as the standard for prehospital combat trauma care throughout the Department of Defense have thus far been inconsistent. Secretary of Defense James Mattis emphasized the importance of TCCC in a letter to the Service Chiefs on 18 January 2013, written while he was the Commander of the US Central Command.

This issue of the JSOM contains another letter from the Commander of the US Central Command, now General Joseph Votel, that once again highlights the requirement for all medical providers—physicians, physician assistants, nurses, medics, corpsmen, and PJs—to complete the Joint Trauma System’s TCCC for Medical Personnel course before deploying to CENTCOM. All other personnel deploying to CENTCOM are required to take the TCCC course designed for non-medical combatants as part of their pre-deployment preparation.

It is worthy of note that General Votel was the same leader who propagated the requirement for TCCC training at the 75th Ranger Regiment as the regimental commander prior to and during initial combat operations into Afghanistan in 2001. His leadership, his predecessors in command, and the superb medical cadre at the regiment have all contributed to making the 75th Ranger Regiment synonymous with excellence in TCCC and lives saved on the battlefield.
Dr. Frank Butler

TCCC Update

TCCC Award 2017

Outstanding Contributions to TCCC

2017 TCCC Award

LTC Ethan Miles
MSG (P) Curt Conklin
75th Ranger regiment

3
Secretary of Defense
James Mattis

General Mattis letter to Service Chiefs
Written during his time as CENTCOM Commander
Highlights Ranger success with TCCC
Stresses importance of TCCC training

DoDI 1322.24, Medical Readiness Training (MRT) Revision

Policy Drivers
- FY 2017 NDAA “To develop standardized combat casualty care instruction for all members of the Armed Forces, including the use of standardized trauma training platforms”
- ASD(HA) Memo to DHB, 18 MAR 18 “Update the guidance for Military Readiness Training, which will address the training for military personnel in Tactical Combat Casualty Care”
- Combat Casualty Care Med R&D Development JROCM 025-15 “Revises current training requirements for first responders (medical and non-medical) to reflect implementation of TCCC guidelines in current and projected future operating environments.”

MRT DoDI Updates

Major Additions
- Establishes TCCC training for all Service Members and DoD Expeditionary Civilians Workforce personnel (medical and non-medical)
- Establishes a TCCC reporting requirement through the Defense Readiness Reporting System (DRRS)
- Assigns responsibilities for animal use in MRT in order to refine, reduce, or replace the use of animals
- Establishes policy for Emergency Preparedness Response Courses (EPRC) Training (CEPNE)

*Thanks to Mr. Ed Whitt and Mr. Kevin Kelley

USMC TECOM Guidance
28 June 2017

“Tactical Combat Casualty Care: Quick Reference Guide to Social Media Outreach

To mitigate the loss of lives and severity of injuries on the battlefield, all combatants and medical personnel on the modern battlefield must be proficient in the concepts of TCCC.”

TCCC Quick Reference Guide
TCCC Social Media Outreach

Thanks, Monty!
Dr. Stephen Giebner

TCCC Curriculum 2017
PHTLS 9

The Biggest Challenge in TCCC

• Knowing WHEN to use the interventions taught in TCCC

• Based on a suggestion by COL Bob Mabry

• TCCC Critical Decision Case Studies will help to illustrate which interventions to perform for casualties with life-threatening conditions.

TCCC Critical Decisions
Circulation Case Study 3

The Setting

• An Army infantry squad is on foot patrol in Iraq
• A dismounted IED detonates
• There are multiple casualties
• There is no effective incoming fire at the moment

TCCC Critical Decisions
Circulation Case Study 3

The Casualty:

• Your casualty has bilateral lower extremity amputations
• There was previously severe bleeding from the amputation sites
• Limb tourniquets were quickly applied to both legs and are effective
• The casualty is alert and in significant pain
• His radial pulse is normal
• The casualty also has multiple penetrating wounds of the abdomen and pelvis

Casualty Dashboard

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>AVPU</td>
<td>Alert</td>
</tr>
<tr>
<td>Airway</td>
<td>Patent with patient dazed but breathing well</td>
</tr>
<tr>
<td>Breathing</td>
<td>RR 16 and unlabored</td>
</tr>
<tr>
<td>Radial Pulse</td>
<td>Strong</td>
</tr>
<tr>
<td>O2 Saturation</td>
<td>95%</td>
</tr>
</tbody>
</table>
TCCC Critical Decisions
Circulation Case Study 3

Question

What is the NEXT action you should take?

1. Start an IV and administer 1 gm of TXA
2. Start an IV and administer 500 mL of Hextend, since there are no blood products available on this operation
3. Administer 50 mg of ketamine IM
4. Try to convert both tourniquets to other modes of hemorrhage control

Correct Answer and Feedback

1. Start an IV and administer TXA

This casualty does need battlefield analgesia, but the most important aspect of care right now is to start an IV and administer 1 gm of TXA. He is at risk of non-compressible hemorrhage due to his penetrating abdominal and pelvic wounds. He does not require fluid resuscitation at the moment.

Wilderness Medical Society
TCCC Preconference 2016

June 2017
Dedicated TCCC issue of “Wilderness and Environmental Medicine”

- July 2016
- Dr. Brad Bennett and COL Ian Wedmore
- 22 TCCC presenters

Recent Changes to the TCCC Guidelines

Extraloggic Airways in TCCC
Dr. Mel Otten
Approved 28 August 2017
Vote 34-5

TCCC Journal Watch

TCCC Article Abstracts:
Monthly focused PUBMED search of prehospital trauma literature

TCCC Distro List
- TCCC Change Notices
- TCCC Article Abstracts
- TCCC Info Items

* To be added to the list: danielle.m.davis.civ@mail.mil

Hemostatic Dressings in Civilian EMS Systems

Availability and use of hemostatic agents in prehospital trauma patients in Pennsylvania translation from the military to the civilian setting

- Sigal et al – Open Access Emergency Medicine
- 93 ALS and Air Medical EMS systems in Pennsylvania
- 46% carry hemostatic dressings
- Galento – California EMS systems in 2013 – 7% had HDS
- “Tactical Combat Casualty Care has drastically changed the practice of combat medicine by training front-line personnel in advanced life-threatening treatments, including hemorrhage control.”
View the entire slide presentation at https://www.jsomonline.org/Winter2017TCCC.php
Inside this Issue:

› In Brief: Female Genital Mutilation
› Extraglottic Airways in Tactical Combat Casualty Care
› User, Glove, and Device Effects on Tourniquet Use
› Tourniquet Distance Effects
› Use of Pts to Evaluate Musculoskeletal Injuries
› Therapy Dogs and Military Behavioral Health Patients
› SOF Truths for ARSOF Surgical Teams
› Anesthesia Support for Surgical Missions
› Medical Skills Course for Partner Forces
› SRT Prehospital Damage Control
› Emergency US to Detect Wooden Foreign Bodies
› “MARCH PAWS” as a Checklist for Pararescuemen
› Ongoing Series: Canine Medicine, Clinical Corner, Human Performance Optimization, Infectious Diseases, Injury Prevention, Preventive Medicine, Prolonged Field Care, SOFsono Ultrasound Series, Special Talk: An Interview, Unconventional Medicine, The World of Special Operations Medicine, Book Review, TCCC Updates, and more!

Dedicated to the Indomitable Spirit and Sacrifices of the SOF Medic

A Peer-Reviewed Journal That Brings Together the Global Interests of Special Operations’ First Responders