

Tactical combat casualty care: A rule and not an exception!!!



INTRODUCTION

Since time immemorial, any nation has been constantly in a state of dynamism with elements of peace, war, and conflict. Naturally, any country would resort to diplomatic and political measures to avoid conflict situations, yet it becomes prudent for their armed force to be battle ready for offensive and defensive operations. There has been a paradigm shift like warfare over the decades, so the casualty rates and treatment outcomes have remarkably improved. Although the age-honored doctrines of casualty care have shown resilience, the scenario may change due to warfare's nature, namely proxy, low-intensity conflict (LIC), border wars, or skirmishes to highly lethal forms, such as nuclear, biologic, and chemical (NBC) war situations.

BACKGROUND AND CURRENT SCENARIO

No group has learned more about the care of the injured in the past few decades than any nation's armed forces. It is said that the only advantage of a war-like situation is the improvement in the care of injured soldiers. However, the same concepts need to be extended to civilian casualties that sustain such war-like injuries due to armed conflicts. The same concepts are now rushed into civilian medical establishments to provide trauma care. The concept of training the military medic and the warrior himself has served as a "force multiplier" from a medical standpoint.

It has been estimated that a wounded individual has the greatest probability of dying within the first hour after sustaining any injury, and the events that occur even before evacuation may result in irreversible morbidity and, in most cases, mortality. The causes may have a wider arena for basic management, but hemorrhage alone constitutes 50% of fatalities. The role of "trained buddy" can be exploited in that if he can control or arrest an external arterial hemorrhage, it can be a life-saving measure as he would be the only personnel available during the precious golden hour. Does this mean that the present concepts of ABCDE in primary management of trauma need alteration and XABCDE is the need for reality (where X is stopping of exsanguinating hemorrhage)?

Tactical combat casualty (CAS) care (TCCC)

TCCC is the prehospital care rendered to a casualty in a tactical combat environment. The principles of TCCC are fundamentally different from those of traditional civilian trauma care, where most medical providers and medics train. These differences are based on both the unique patterns and types of wounds that are suffered in combat and the tactical conditions that medical personnel face in combat. Unique combat wounds and tactical conditions make it difficult to determine which intervention to perform at what time. Besides addressing a casualty's medical condition, responding medical personnel must also address the tactical situation faced while providing casualty care in combat. A medically correct intervention performed at the wrong time may lead to further casualties.

The application of the principles of TCCC has saved lives. However, TCCC training and practice have not been ubiquitous among prehospital first responders. Furthermore, TCCC training is not always taught using a high-quality, standardized curriculum, and what is taught in a particular course may not at all reflect the recommendations in the current TCCC guidelines. The Advanced Trauma Life Support (ATLS) manual mentions TCCC as a part of the ATLS-Operational Environment (OE).

Care under fire (CUF)

It is the care rendered by the battle buddy at the point of injury while he and the casualty are still under effective hostile fire. The risk of additional injuries at any moment is extremely high for both the casualty and the battle buddy. The considerations include suppression of hostile fire, moving the casualty to a safe position, and treatment of immediate life-threatening hemorrhage. The challenges include the following: The paucity of medical equipment is available; the comrades involved in the conflict may be unavailable for support during casualty evacuation; and the tactical situation prevents the medic or medical provider from performing a detailed examination or definitive treatment of casualties.

Tactical field care (TFC)

Care is rendered to the casualty once the casualty and battle buddy are no longer under effective hostile fire. This term

also applies to situations in which an injury has occurred on a mission, but there has been no hostile fire. The characteristics are as follows: The risk from the hostile fire has been reduced but still exists; the medical equipment available is still limited by what has been brought into the field by mission personnel; and the time available for treatment is highly variable. The time before evacuation, or reengagement with hostile forces, can range from a few minutes to many hours.

Tactical evacuation care

Care is rendered once the casualty has been picked up by an aircraft, vehicle, or boat for transportation to a higher echelon of care. It is also mandatory that the maintenance of parameters, such as circulation–airway–breathing (CAB), is intact at all times, and the conditions that were stabilized during the TFC should not deteriorate at any given time. Although the onward evacuation is taken care of by other people, usually those of the medical echelon, the battle buddy plays a crucial role in making contact and handing the casualty with little damage to life and equipment.

APPLICATIONS OF PRINCIPLES OF TCCC IN FUTURE WAR

Despite paradigm changes in warfare over the last two centuries, this time-honored principle of casualty care has shown remarkable resilience. However, with the advent of the information age that may change, we are on the cusp of a revolution in precision. New and developing technologies will alter the future of warfare, providing tremendous increases in knowledge and speed. Knowledge enables us to know where we are, where our friends are, and where the enemy is. Speed will take the form of rapid deployment and high-tempo, pulsed operations that seek to destroy an enemy's will to resist. The symbiotic relationship of knowledge and speed will allow the ability to maneuver with precision and provide

a better understanding of providing immediate medical care via a battle buddy. Centers of gravity will remain relevant. The principles of immediate care of casualties will remain the same as those of "saving life and limb." The changing geopolitical trends have led to consequences where care has to be provided under consequences of heavy fire and heavy combat situations. It may become mandatory in situations where a provider is armed with training and the know-how to manage challenging situations.


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