With the passing of conventional warfare in Operation Iraqi Freedom (OIF) I during the spring of 2003, the fight in Iraq changed dramatically. As we continue the war on terrorism, we now face an asymmetrical battlefield with a new and transformed Army. This new war generates many different challenges to both the warfighter and the medic who must save his life. Up to 90 percent of combat deaths occur on the battlefield before a casualty ever reaches a medical treatment facility (MTF). The first 10 minutes are a key determining factor in whether or not the wounded warrior will live or die. Soldiers and medics who have the proper training, equipment and mind-set will vastly improve the chances for saving his life.

Medical success starts with pre-deployment medical training and the brigade surgeon section should take the lead with support from the brigade combat team (BCT) operations officer (S-3). Pre-deployment training should include a robust medical focus for every Soldier, not just the medics. Brigade should emphasize through the orders process the medical training required or ensure at a minimum that training is conducted in accordance with all training guidance. Prior to any combat deployment, it is easy for the warfighter to focus more on live-fire ranges and weapons training that require medical coverage. The benefit to medics during this coverage is often limited due to a lack of casualty play. The brigade surgeon section should offer the battalions separate medical training opportunities as well as integrating medical training with the
The primary focus of the Platinum 10 is to stop the bleeding in the first 10 minutes. The temporary use of a tourniquet to manage life-threatening extremity bleeding is recommended. This principle is supported by the wealth of Vietnam conflict combat casualty data indicating injuries from blood loss due to extremity injuries represented the number one etiology of preventable battlefield deaths. Therefore, in the 101st Airborne Division (Air Assault), all medics must go through the Tactical Combat Casualty Care (TC3) course. This innovative program changes the traditional focus of Airway, Breathing, and Circulation (A-B-C) to Circulation, Breathing, and Airway (C-B-A). Use of the Combat Application Tourniquet (CAT) is heavily emphasized along with the use of blood loss replacement fluids like Hextend and specialized clotting agents such as Quick Clot and Hemcon dressings that clot bleeding in areas where tourniquets won’t work, i.e. groin, neck, etc. The course is designed to address the primary causes of preventable deaths. It also focuses on treatment under fire in hostile areas. The training is conducted both in a classroom and under hands-on, high stress, realistic environments that involve high fidelity mannequins and pyrotechnics. Army Medical Command (MEDCOM) adopted the TC3 concept as the standard for combat medic training and fielded it as Combat Medic Advanced Skills Training, (CMAST). In addition to TC3, we sent

Tactical Combat Casualty Care (TC3) Course

Soldiers from the 1st Battalion, 502nd Infantry treat a wounded squad member while on a patrol south of Baghdad.
several medics on a partnership program we created with the local Emergency Medical Services (EMS). The Strike Medic Ambulance Ride-along Training (SMART) program allowed medics to spend 10 or 12-hour days with the local Montgomery County EMS. This allowed our medics to gain invaluable real-life medical experience under the supervision of seasoned paramedics.

The 101st Airborne also revamped its CLS program. Its replacement, Eagle First Responder (EFR), teaches advanced first aid using the same concepts as TC3 focusing on C-B-A, using the CAT and updated triage techniques. The emphasis is to treat immediate life-threatening injuries up front and quickly. A TC3-trained medic or CLS will know that a Soldier with a traumatic amputation needs a properly placed CAT first, then an IV before being evacuated. Untreated, the casualty would have bled to death in about 5 to 10 minutes but will survive because of the emphasis on treating the life-threatening injury up front. The importance of having properly trained medics and CLS combined with an individual first aid kit (IFAK) on every Soldier has never been more important. Remember, the IFAK is only as useful as the individual using it. If all Soldiers are not properly trained on using the CAT and other items in the IFAK, the kits are useless. Proper pre-deployment and in-country medical training that focuses on the first 10 minutes will pay huge dividends and save lives.

The transformed BCT tactics today in both Iraq and Afghanistan are more similar to the Vietnam era or Special Operations Forces (SOF) tactics than to the linear battlefield we trained for over the past 30 years. Long gone are the mass assaults using multiple divisions, brigades, and battalions. Today, most operations are company size or smaller. Currently in the 502nd Infantry Regiment, 2nd BCT, 101st Airborne Division, we average around 100 daily patrols in what is considered one of the most dangerous parts of Iraq. The area south of Baghdad between the Tigris and Euphrates Rivers not only contains the notorious “Triangle of Death,” an area between the towns of Mahmudiya, Yusafiyah, and Iskandaria that has long been known as a Sunni and Shiite hotbed, but also hundreds of miles of canals that create a web of roads and obstructions across a sprawling farming basin. These canals are paralleled by dirt and paved roads that are littered with improvised explosive devices (IEDs) and old IED craters that make any ground medical evacuation (MEDEVAC) mission an extremely hazardous operation.

Historically, this area was home to Saddam’s weapons and munitions factories. Although these factories pose little threat today, the anti-Iraqi forces (AIF) have easily recruited people from this region who have a great deal of experience working with explosives. Directional charge IEDs are becoming more frequent and recent tactics indicate the ability to adapt. With the effectiveness of the IEDs, some estimated as large as 500 pounds of explosives, we realized there were a few medical tactics, techniques, and procedures (TTPs) we needed to address and master.

Our brigade’s casualty count represented well over 50 percent of the casualties for the entire 4th Infantry Division during their

A casualty is evacuated from a forward operating base in Iraq.
Captain Dennison Segui
first eight and a half months in country. It could have been far worse. Fortunately, excellent pre-deployment training, development of in-country TTPs and world class air MEDEVAC and treatment at the CSH greatly reduced the number of fatalities during a costly second tour for the STRIKE BCT.

Medical planning centers on small units versus an overall brigade-level operation. Instead of splitting the battalion aid station (BAS) into a forward aid station (FAS) and main aid station (MAS) and leapfrogging them, smaller treatment teams are usually sent forward to support relatively static areas. These teams usually consist of the physician assistant (PA) and a few experienced medics with limited medical supplies. For larger operations, the medical platoon leader will usually accompany the battalion surgeon and co-locate with the tactical command post (TAC) or cover a section left without adequate medical coverage due to the size and nature of the operation. The BCT surgeon and medical plans officer focus on coordinating and providing resources to support battalion and below missions rather than planning for brigade-level missions.

In Iraq, air MEDEVAC has reached a level of near perfection. The process and frequencies have been standardized in theater leading to an average wheels up time of around 10 minutes. Depending upon location in theater, the aircraft is usually on scene in anywhere from 15 to 30 minutes. In our area of operations (AO), air MEDEVAC is green approximately 95 percent of the time. Air MEDEVAC does however, have some limitations — the biggest being the weather. Sandstorms are the most common cause for grounding aircraft with thunderstorms being the next most common reason. Weather conditions vary by region and season in Iraq. Our AO requires gun ship support and will occasionally launch with two MEDEVAC aircraft if gunship support is not readily available. Hasty landing zones (LZs) must be quickly and properly established. Once again, terrain constraints usually play a key role in site selection. Improperly established LZs may either delay the aircraft’s arrival or jeopardize the safety of the crew or Soldiers on the ground.

Ground evacuation is challenging for many reasons. Depending upon the area, the roads can be heavily IED laden and/or covered with craters from old IEDs, making them impassable or too narrow for tracked vehicles. The biggest challenge, however, is the lack of an adequate up-armored front line ambulance (FLA). M113s are slower than M1114s, have higher maintenance needs and are fairly ineffective against many IEDs. In most cases, units usually stabilize the casualties the best they can and place them in an M1114 and drive to the nearest appropriate medical facility. Twice in the STRIKE Brigade, we began evacuation by ground in an M1114. When air evacuation was approved, we halted the vehicle en route. They quickly established a hasty LZ, and we directed the aircraft to their grid, quickly getting the casualties to the CSH. This is important to remember because time is always critical. A final alternative we are still researching is the use of the Cougar which is made by Force Protection, Incorporated. They are the same company that makes the Buffalo vehicle series which is used for IED route clearance. It will hold up to two litter patients without major modifications and is a very survivable and quick up-armored vehicle. Furthermore, Force Protection Inc. makes an armored ambulance version but has not been used in Multi-National Division – Baghdad (MND-B) to date.

Battle tracking during a MEDEVAC is simple when an effective and practiced battle drill is established. The first critical step to success is having the unit on the ground call directly to the air ambulance company for “Urgent” casualties if possible. In cases where communication with the air ambulance company isn’t possible, the fewest number of people required to get the 9-line to them is crucial. Units should not be required to call 9-lines through their chain of command — this only slows down the process. Several modes of communication have simplified situational understanding greatly. WAVE Desktop Communicator allows several FM channels to be monitored simultaneously. We generally monitor our brigade command net and the MEDEVAC net. We also use an Internet Relay Chat program called mIRC which allows us to essentially instantly message anyone monitoring the program. Units have individual chat rooms and each air ambulance company has a room for each location. There is also one main MEDEVAC room for the entire theater where information, updates, and 9-lines are relayed. We are also able to see aircraft launch and arrival times at LZs and the CSH.

Once the aircraft arrives at the CSH, we wait approximately 15 minutes and call for an update on patient status to the liaison officers (LNOs) provided by division. The brigade surgeon section takes the lead on this to prevent multiple phone calls asking the same questions. The brigade aviation
Soldiers unload an injured Iraqi Army soldier at the 47th Combat Support Hospital in Mosul.

Staff Sergeant Jacob N. Bailey, USAF

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