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|  |  | **Tactical Combat Casualty Care for All Combatants 02 June 2014**  **Scenarios** | We’ve talked about the basic TCCC trauma management plan.  Now let’s apply the guidelines to some selected scenarios. |
|  |  | **Tactical Casualty Scenarios**   * If the basic TCCC combat trauma management plan doesn’t work for the specific tactical situation, then for combat medics, corpsmen, PJs and combatants – **it doesn’t work.** * *There are no rigid guidelines for combat tactics* – THINK ON YOUR FEET. * Scenario-based planning is critical for success in TCCC * Examples follow: | Read the text. |
|  |  | **SEAL Casualty – Afghanistan**   * August 2002 * Somewhere in Afghanistan * SEAL element on direct action mission * Story of the casualty as described by the first responder – NOT a corpsman | This is a real story that dramatically illustrates the difficulty of trauma care on the battlefield. |
|  |  | **SEAL Casualty – Afghanistan**  “There were four people in my team, two had been shot. Myself and the other uninjured teammate low crawled to the downed men. The man I came to was lying on his back, conscious, with his left leg pinned awkwardly beneath him. He was alert and oriented to person, place, time, and event. At that point I radioed C2 (mission control) to notify them of the downed man.” | Read the text. |
|  |  | **SEAL Casualty – Afghanistan**  “Upon closer inspection, his knee was as big as a basketball and his femur had broken. The patient was in extreme pain and did not allow me to do a sweep of his injured leg. He would literally shove me or grab me whenever I touched his leg or wounds. I needed to find the entrance and exit wound and stop any possible arterial bleeding.” | Read the text. |
|  |  | **SEAL Casualty – Afghanistan**  “But there was zero illumination and he was lying in a wet irrigation ditch. So I couldn’t see blood and I couldn’t feel for blood.” | Picture yourself in this situation. You’ve got a casualty who is badly hurt and you can’t see a thing. |
|  |  | **SEAL Casualty – Afghanistan**  “We were also in danger because our position was in an open field (where the firefight had been) and I had to provide security for him and myself. So, I couldn’t afford to turn on any kind of light to examine his wounds. I told him to point to where he felt the pain. He had to sort through his pains.” | Read the text. |
|  |  | **SEAL Casualty – Afghanistan**  “He had extreme pain in his knee and where his femur had been shattered as well as a hematoma at the site of the entrance wound (interior and upper left thigh). Finally, he pointed to his exit wound (anterior and upper left thigh). Again, I had no way of telling how much blood he had lost. But I did know that he was nonambulatory.” | Read the text. |
|  |  | **SEAL Casualty – Afghanistan**  “So I called C2 again. I gave him the disposition of the patient as well as a request for casevac, a Corpsman, and additional personnel to secure my position and assist in moving the patient to the helicopter. I thought about moving the two of us to some concealment 25 meters away, but we were both really low in a shallow irrigation ditch. I felt safer there than trying to drag or carry a screaming man to concealment.” | Read the text.  C2 = Command and Control |
|  |  | **SEAL Casualty – Afghanistan**  “Between providing security and spending a lot of time on the radio I didn’t get to treat the patient as much as I wanted to. I had given him a Kerlix bandage to hold against his exit wound. When he frantically told me that he was feeling a lot of blood, I went back to trying to treat him. I couldn’t elevate his leg. To move it would mean he’d scream in pain, which wasn’t tactical.” | Read the text. |
|  |  | **SEAL Casualty – Afghanistan**  “There was just no way he would allow me to apply a pressure dressing to the exit wound even if I could locate it and pack it with Kerlix. So, I decided to put a tourniquet on him.” | Read the text. |
|  |  | **SEAL Casualty – Afghanistan**  “His wounds were just low enough on his leg to get the tourniquet an inch or so above the site. I had a cravat and a wooden dowel with 550 cord (parachute cord) attached to it to use as a tourniquet. I told him to expect a lot of pain as I would be tightening the cravat down.“ | Note the makeshift tourniquet. When we first started the war in Afghanistan, most U.S. forces were not deploying with issued tourniquets. |
|  |  | **SEAL Casualty – Afghanistan**  “At this point he feared for his life so he agreed. Once I got it tightened I had trouble securing it. The 550 cord was hard to get underneath the tightened cravat.” | You need to be able to get a tourniquet on a wounded teammate with zero illumination. |
|  |  | **SEAL Casualty – Afghanistan**  “After over 5 minutes, the Corpsman arrived along with a CASEVAC bird and a security force. Moving the patient was very hard. Four of us struggled to move him and his gear 25 meters to the bird. The patient was over 200 pounds alone and we were moving over very uneven terrain.” | Read the text. |
|  |  | **SEAL Casualty – Afghanistan**  “We wanted to do a three-man carry with two men under his arms and one under his legs. But again, his leg was flopping around at the thigh and couldn’t be used to lift him.” | Experienced combat medical personnel say that moving the casualty is typically the biggest challenge in TCCC. |
|  |  | **SEAL Casualty – Afghanistan**  “The bird, (a Task Force 160 MH-60) had a 50-cal sniper rifle strapped down, which made it hard for us to get him in. It took us minutes to get him 25 meters into the bird. The Corpsman went with my patient as well as the other downed man in my team and I went back to the op.” | Was the tourniquet a good move?  Absolutely – probably saved the casualty’s life.  Would a pressure dressing have been a good idea if tolerated by the patient?  NO – a pressure dressing won’t necessarily stop a big bleeder. |
|  |  | **Urban Warfare Scenario** | Now let’s look at a scenario in urban warfare operations. |
|  |  | **Real-World Scenario**   * High-threat urban environment * 16-man Ranger team * 70-foot fast rope insertion for a building assault * One man misses the rope and falls * Unconscious on the ground * Bleeding from mouth and ears * Unit is taking sporadic fire from all directions from hostile crowds | Anybody recognize this casualty?  this was the first Ranger casualty in Mogadishu.  Has everyone here seen “Blackhawk Down?” |
|  |  | **The Battle of Mogadishu**   * Somalia – Oct 1993 * US casualties: 18 dead, 73 wounded * Estimated Somali casualties: 350 dead, 500 wounded * Battle was 15 hours in length | At the time, this was the biggest battle involving U.S. forces since Vietnam. |
|  |  | **Mogadishu Complicating Factors**   * Helo CASEVAC not possible because of crowds, narrow streets and RPGs * Vehicle CASEVAC not possible initially because of ambushes, roadblocks, and RPGs * Gunfire support problems   + Somali crowds included non-combatants   + Somalis able to take cover in buildings   + RPG threat to helo fire-support gunships | We have talked about factors that make evacuation by helicopter difficult..  We can add narrow streets and RPG fire to that list.  There were LOTS of U.S. helos over Mogadishu, but we were not able to evacuate the casualties with them for these reasons. |
|  |  | **Care Under Fire**   * Return fire? * Move patient to cover right away or wait for long board? * How should he be moved? * Urgency for evacuation? | Should the first responder return fire or care for casualty?  It was reasonable to have someone (a medic or corpsman would be preferred, if available) to attend casualty in this scenario  Why?  Total suppression of hostile fire was not possible.  The crowd was large – the team couldn’t eliminate all the hostiles.  There were a good number of guns on the team – sparing one man for casualty care made little difference in defensive firepower.  The casualty wad critically injured.    Does that break our rule about shooting first and treating later?  Yes - but that’s OK – it’s the right answer for this particular situation.  What’s next?  Move patient to cover right away?  Is he at risk for a spinal cord injury if moved? Yes, but he’s also very much at risk of getting shot.  You probably DO want to get him to cover immediately. (Cover was available at side of road.)  How do you want to move him?  Carefully!!  Cradle head with forearms to stabilize neck and drag  What about his airway?  Chin-lift/jaw-thrust and NP airway  Urgency for evacuation?  There’s little that can be done at a FST (forward surgical team) for this kind of head injury.  Possible ruptured spleen or other internal bleeding may be bigger issue acutely  Tactical commander in Mogadishu split his force rather than wait 30 minutes for evac ground vehicles.  Does he need antibiotics or analgesia?  No – he has no open wounds and he is unconscious. An unconscious casualty doesn’t need pain meds, and you wouldn’t put pills in his mouth anyway.  The actual outcome?  The Ranger survived his injuries.  End of scenario |
|  |  | **Mogadishu Scenario 2 Helo Hit by RPG Round** | Here is a second real-world scenario from Mogadishu, presenting a very different tactical situation. |
|  |  | **Mogadishu Scenario 2 Helo Hit by RPG Round**   * Hostile and well-armed (AK-47s, RPG) crowds in an urban environment * Building assault to capture members of a hostile clan * Blackhawk helicopter trying to cover helo crash site * Flying at 300 feet | Read the text. |
|  |  | **Mogadishu Scenario 2 Helo Hit by RPG Round**   * Left door gunner manning a 6-barrel M-134 minigun (4000 rpm) * Hit in hand by ground fire * Another crew member takes over the mini-gun * An RPG impacts under the right door gunner | Read the text. |
|  |  | **Mogadishu Scenario 2 Helo Hit by RPG Round**   * Windshields all blown out * Smoke filling the aircraft * Right minigun not functioning * Left minigun unmanned and firing uncontrolled * Pilot transiently unconscious - now becoming alert | Read the text. |
|  |  | **Mogadishu Scenario 2 Helo Hit by RPG Round**   * Co-pilot unconscious - lying forward on the helo’s controls * Crew Member   + Leg blown off   + Lying in puddle of his own blood   + Femoral bleeding | Read the text. |
|  |  | **Mogadishu Scenario 2 Helo Hit by RPG Round**   * YOU are the person providing care in the helo. * What do you do first? | What are your options for first actions?  Casualty with femoral bleeding  Unconscious co-pilot  Semi-conscious pilot  Stop the uncontrolled min-gun from firing    Who gets treated first?  Take care of the pilot first  Want to get him back flying the aircraft  Most important thing about medical care in an aircraft is to try to keep the  aircraft in the air    What’s next?  Casualty with the femoral bleeder is next  Needs a tourniquet  He should be able to provide self-care if conscious  The individual in Mogadishu treated himself  Used an improvised tourniquet  Survived  What can you do for the unconscious co-pilot?  Get him off the controls  Supine position and establish airway with NPA  Check for external bleeding – none seen  Next action?  Check casualty with injured hand  Stop any severe bleeding  What else?  Radio for help  Prepare for impact if crash landing anticipated  After impact – security for weapons and ordnance  End of scenario |
|  |  | **Military Operations in Urban Terrain** | Now let’s look at a couple of scenarios that are representative of what we are seeing in Afghanistan at present. |
|  |  | **MOUT Scenario 1**   * A U.S. ground element is moving on a high-value target in an urban environment. * The first two men in a 8-man patrol are shot by an individual with an automatic weapon while moving down a hallway in a building. * The attacker follows this burst with a grenade. | Read the text. |
|  |  | **MOUT Scenario 1**   * One casualty is shot in the abdomen, but conscious. * The second casualty is shot in the shoulder with severe external bleeding. * The third casualty is unconscious from the grenade blast. * The attacker withdraws around a corner. | Read the text. |
|  |  | **MOUT Scenario 1**   * YOU are the person providing medical care. * What do you do? | What are the tactical considerations here?  How many other hostiles in are in house?  All pursue hostile – leave casualties for later?  All withdraw to care for casualties?  Set security and treat casualties there?  Split force – have some pursue and others treat?  Split force most often chosen as the best option from previous  groups.  Who gets treated first?  Casualty with Shoulder Injury  Most important to treat immediately – could bleed to death quickly  Stop bleeding with Combat Gauze dressing  Apply with direct pressure for 3 minutes  Airway Management?  OK - conscious  Combat pill pack?  Yes  What next?  Unconscious Casualty with Blast Injury  Airway Management?  Chin-lift/jaw thrust  NP airway  Check for other injuries  Find major bleeding in back of thigh from shrapnel wound  Apply tourniquet  Combat pill pack?  No – needs IV antibiotics – unconscious and can’t swallow – medical personnel administer when feasible  Next?  Abdominal Wound Casualty  Airway Management?  OK – conscious  Combat pill pack?  Yes – casualty can self-administer    End of scenario |
|  |  | **MOUT Scenario 2** |  |
|  |  | **MOUT Scenario 2**  **SCENARIO HISTORY:** While on patrol in the city of Tal Afar your platoon receives effective direct small arms fire. A 22-year-old unit member falls to the ground and begins screaming, holding his right leg. The platoon, including you, reacts to the ongoing contact by returning fire. | Read the text. |
|  |  | **MOUT Scenario 2**   * You can see that the casualty is bleeding heavily from his leg wound. * YOU are the person providing medical care for this casualty. * What do you do? | What phase are you in?  Care Under Fire  What should you do for the casualty?  Yell at him to get under cover if he can.  Tell him to put a tourniquet on his wounded leg.  May have to help him.  Consider movement plan/suppression fire, etc. if you do.    Should he take his Combat Pill Pack meds now?  No. Still in Care Under Fire phase  Priorities are to get to cover and return fire if possible  Scenario continues. Casualty has moved behind a vehicle. All hostiles are eliminated or have retreated. The platoon establishes a secure perimeter. Platoon leader tells you that you have only one casualty, and that you have a few minutes to work on him before the platoon will have to move.  What phase are you in now?  Tactical Field Care  Your casualty is alert, still in severe pain, and clutching his right leg. There is blood all over his leg and hands, and a tourniquet is in place on his right thigh. What is your first concern?  Control of life-threatening bleeding.  What next?  You check the tourniquet.  It is positioned correctly.  The bleeding has been controlled.  You search quickly for any other life-threatening bleeding, and find none.  Should you disarm the casualty?  No. He is alert and wants to stay in the fight.  Next concern?  Airway is patent.  Casualty is conscious and talking – airway is OK.  Next?  Breathing.  Breathing is rapid from pain and the situation, but not labored.  What next?  Check for shock.  Mental status is normal. Radial pulse is strong.  Next?  Assess for other wounds.  You discover a large bruise on his chest and RUQ overlying the liver. You  check his body armor and find corresponding damage compatible with a  bullet strike.  Next?  Prevent hypothermia.  Ready Heat Blanket  Heat Reflective Shell  Next?  Inspect and dress his wound.  Reassess  Platoon leader tells you the unit will move in 10 minutes to a CASEVAC location. No enemy contact is expected. CASEVAC should take about 45-60 minutes.  The casualty has taken his own Combat Pill Pack. He is in significant pain  What else?  Reassure  Document care  You have now moved to the CASEVAC site. The platoon establishes security. You check the patient and notice that he is confused and breathing rapidly. You check his thigh wound and find that his tourniquet has become loose and the dressing is soaked with blood.  What next?  Re-tighten first tourniquet. Use a second CAT if needed.  What next?  Nasopharyngeal airway - casualty is unconscious.  Recovery position  Transport ASAP  End of scenario |
|  |  | **Questions?** |  |
|  |  | **Tactical Combat Casualty Care**   * **Casualty scenarios on the battlefield usually entail both medical and tactical problems.** * **Emergency actions must address both.** * **Medical personnel should be involved in mission planning.** | In summary:  Good tactical medicine HAS to be a combination of good tactics and good medicine.  Bring your leadership into the medical plan.  Combat leaders must understand combat medicine. |
|  |  | **Scenario-Based Planning**   * **The TCCC guidelines for combat trauma scenarios are advisory rather than directive in nature.** * **Rarely does an actual tactical situation exactly reflect the conditions described in planning scenarios.** * **Those providing casualty care will typically need to modify the medical care plan to optimize it for the real scenario.** | Read the text. |
|  |  | **The 3 Objectives of TCCC**   * **Treat the casualty** * **Prevent additional casualties** * **Complete the mission** | Once more….. |
|  |  | **The End**  **The U.S.S. Arizona Memorial** | This is a photo of the Arizona Memorial in Pearl Harbor. |