

TCCC Critical Decision Case Studies



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The Biggest Challenge in TCCC

- **Knowing WHEN to use the interventions taught in TCCC**
- **Based on a suggestion by COL (retired) 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 2

The Setting

- A small unit is patrolling outside of a village
- There is a single shot from somewhere in the village
- No other hostile fire



TCCC Critical Decisions Circulation Case Study 2

The Casualty

- Single gunshot wound to abdomen
- The casualty was alert initially but is now becoming confused
- The radial pulse is weak
- You have already started an IV and administered 2gm of TXA



TCCC Critical Decisions Circulation Case Study 2

Casualty Dashboard

- | | |
|-----------------------------|----------------------------|
| • AVPU | Alert but confused |
| • Airway | Patent |
| • Breathing | RR 20 and unlabored |
| • Radial Pulse | Present but rapid and weak |
| • O ₂ Saturation | 96% |



TCCC Critical Decisions Circulation Case Study 2

Question

What is the NEXT action you should take?

1. Administer another gram of TXA
2. Infuse a unit of freeze-dried plasma
3. Administer a unit of Low Titer Type O Whole Blood as per unit protocol
4. Administer 1gm of eripenem to prevent infection



TCCC Critical Decisions Circulation Case Study 2

Correct Answer and Feedback

3. Administer a unit of Low Titer Type O Whole Blood as per unit protocol

The casualty has gone into shock from intra-abdominal hemorrhage. The best resuscitation fluid for hemorrhagic shock is whole blood and giving a unit of that should be the next action taken.



TCCC Critical Decisions Breathing Case Study 3

The Setting

- A platoon of Marines is approaching a village to meet with village leaders
- One Marine steps on a pressure-plate IED and it explodes
- There is no effective incoming fire at the moment



TCCC Critical Decisions Breathing Case Study 3

The Casualty

- Facial peppering
- Below the knee amputation - left leg
- Above the knee amputation - right leg
- Multiple fragment wounds to pelvis and abdomen
- Leg bleeding is controlled with tourniquets
- 15 minutes later, while waiting for evacuation, he is noted to have labored breathing
- He becomes confused, then loses consciousness
- Not breathing
- There is no radial or carotid pulse detectable



TCCC Critical Decisions Breathing Case Study 3

Casualty Dashboard

- | | |
|-----------------------------|--------------------------------|
| • AVPU | Unconscious |
| • Airway | Apparently patent |
| • Breathing | Not breathing |
| • Radial Pulse | None |
| • O ₂ Saturation | Not displaying on the pulse ox |



TCCC Critical Decisions Breathing Case Study 3

Question

What is the NEXT action you should take?

1. Perform CPR
2. Perform needle decompression on both sides of the chest
3. Declare the casualty deceased and discontinue care
4. Start an IV



TCCC Critical Decisions Breathing Case Study 3

Correct Answer and Feedback

2. Perform needle decompression on both sides of the chest

This casualty has lost vital signs. This could be due to non-compressible hemorrhage, but it may also be due to tension pneumothoraces. Casualties with chest or abdominal trauma or polytrauma who suffer a traumatic cardiac arrest should have needle decompression performed on both sides of the chest. If the arrest was caused by a tension pneumothorax, this maneuver may result in a return of vital signs.



TCCC Critical Decisions Airway Case Study 2

The Setting

- A small unit is on foot patrol
- There is incoming fire from two hostiles
- The hostile threat is quickly eliminated by the unit
- One of your unit members sustains a gunshot wound to the lower face
- There is no further effective incoming fire



TCCC Critical Decisions Airway Case Study 2

The Casualty

- The casualty is awake
- There are facial wounds to lower jaw and teeth
- There is blood in the mouth
- The casualty has noisy, rapid breathing while in the supine position
- He is struggling to breathe



TCCC Critical Decisions Airway Case Study 2

Casualty Dashboard

• AVPU	Alert
• Airway	Facial injuries
• Breathing	RR 22 - Noisy
• Radial Pulse	Strong
• O ₂ Saturation	75%



TCCC Critical Decisions Airway Case Study 2

Question

What is the NEXT action you should take?

1. Cricothyroidotomy
2. Nasopharyngeal airway
3. Endotracheal intubation
4. Allow this conscious casualty to assume any position that best protects the airway, to include sitting up and leaning forward.



TCCC Critical Decisions Airway Case Study 2

Correct Answer and Feedback

4. Allow this conscious casualty to assume any position that best protects the airway, to include sitting up and leaning forward.

The diagnosis is airway obstruction due to his maxillofacial injuries. The principle is to open the airway. Since the casualty is conscious, allow him to assume any position that best protects his airway, to include sitting up and leaning forward.



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