

TCCC CRITICAL DECISION CASE STUDIES

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The Biggest Challenge in TCCC

- Is knowing **WHEN** to use the interventions taught in TCCC
- Based on a suggestion by COL Bob Mabry
- These *TCCC Critical Decision Case Studies* will help to illustrate which interventions to perform for casualties with life-threatening conditions.
- They are now part of the TCCC for Medical Personnel curriculum for 2018.

AIRWAY CASE STUDY 1



TCCC Critical Decisions Airway Case Study 1

The Setting

- An IED detonates underneath a vehicle in a mounted convoy
- The vehicle is turned over by the blast
- The casualty is unconscious
- She is not wearing seat belt
- Her helmet is dented
- There is no effective incoming fire at the moment



TCCC Critical Decisions Airway Case Study 1

The Casualty

- Blood and bruising over the right parietal area
- No facial injuries noted
- No other injuries noted
- The unconscious casualty has been removed from the vehicle and is in the supine position
- Chin lift maneuver accomplished



TCCC Critical Decisions Airway Case Study 1

Casualty Dashboard

- | | |
|-----------------|-------------------|
| • AVPU | Unconscious |
| • Airway | No injuries noted |
| • Breathing | RR 12 - shallow |
| • Radial Pulse | Normal |
| • O2 Saturation | 70% |



TCCC Critical Decisions Airway Case Study 1

Question

What is the NEXT action you should take?

1. Cricothyroidotomy
2. Place casualty in a sit-up and lean forward position
3. Start an IV
4. Insert a nasopharyngeal airway



TCCC Critical Decisions Airway Case Study 1

Correct Answer and Feedback

4. Insert a nasopharyngeal airway

This casualty may have an airway obstruction. The low pulse oximetry reading indicates a critical level of hypoxia. This casualty needs her airway opened immediately. There are no facial injuries noted, so a cricothyroidotomy should not be attempted until less invasive measures have failed. The casualty should not be placed supported in a sitting position because of the potential for spinal cord injury. Inserting a nasopharyngeal airway is the best option of the choices shown.

AIRWAY CASE STUDY 2



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 |
| • O2 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.

AIRWAY CASE STUDY 3



TCCC Critical Decisions Airway Case Study 3

The Setting

- A Marine platoon is moving across an open field on foot
- Dismounted IED detonation
- There is no effective incoming fire at the moment



TCCC Critical Decisions Airway Case Study 3

The Casualty

- The face and neck are peppered with shrapnel wounds
- The casualty is alert but noted to have labored respirations and moderate distress
- A small puncture wound is noted on the left side of neck with minimal bleeding
- But there is rapidly expanding swollen area under the skin of the neck immediately adjacent to the midline airway structures



TCCC Critical Decisions Airway Case Study 3

Casualty Dashboard

- | | |
|-----------------|-------------------------------|
| • AVPU | Alert and in distress |
| • Airway | No blood or obstruction noted |
| • Breathing | RR 22 - labored |
| • Radial Pulse | Strong |
| • O2 Saturation | 65% |



TCCC Critical Decisions Airway Case Study 3

Question

What is the NEXT action you should take?

1. Cricothyroidotomy using the CricKey device
2. Nasopharyngeal airway
3. Endotracheal intubation
4. Help the casualty into the sit-up and lean-forward position



TCCC Critical Decisions Airway Case Study 3

Correct Answer and Feedback

1. Cricothyroidotomy using the CricKey device

The diagnosis is airway obstruction due to a rapidly expanding hematoma that has resulted from a shrapnel injury to a large blood vessel in the neck. A nasopharyngeal airway and the sit-up and lean-forward position will not help in this situation. The best next action is a cricothyroidotomy performed with local anesthesia.

KEYWORDS: case reports; airway; TCCC



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