Background

- Airway compromise is currently the second most common cause of preventable death on the battlefield.
- Correction of airway compromise and placement of a definitive airway is widely recognized as a mainstay in preventing hypoxia.
- Surgical Cricothyroidotomy (SC) is the “end of the algorithm”.
- Significant facial trauma is just one condition that might require immediate prehospital SC.

The goals of this study

- Identify prehospital provider lifesaving intervention priorities.
- Identify cognitive barriers to SC.
- Determine reasons why barriers may exist, and whether barriers differ based on levels and types of medical training.

Figure 1. TC3 TFC Guidelines

Methods

- Study design: Military and civilians medical providers of various levels were surveyed on-line and at large EMS conferences.
- Level of training and previous TC3/TECC training were self-reported.
- Segments of a video depicting real-time combat casualty care were viewed: https://augustastate.co1.qualtrics.com/jfe/form/SV_br9K4fx0hZpLTLf

Participants then answered questions about the procedures they would perform and why.

- Question one: After placement of a hasty tourniquet to address massive extremity hemorrhage, the next intervention you would employ would be:

  - Advanced airway (28% vs 20%, p=0.37). More nurses physicians paramedics (17%) indicated the need to perform surgical cricothyrotomy than did EMT basics (6%).

Conclusions

- Surgical airway management was only indicated as necessary by a quarter of advanced civilian providers given a scenario of a patient with significant facial trauma secondary to a blast injury. Although not reaching statistical significance, lower rates in TC3/TECC trained could indicate issues in that training methodology.

References