Hemorrhage Control
Gurganious, Hrdina, Carson
UNC PA Program

Introduction

- Hemorrhage control is a lifesaving intervention that can be performed at the most basic level.
- Hemorrhage control is being incorporated into emergency field care.
- Stop the Bleed provides training to the most likely first responders and bystanders.
- These Programs promote tourniquets use in controlling life threatening hemorrhage.

- A Strength, Weakness, Opportunities, Threat (SWOT) analysis was performed on the Stop the Bleed program to determine if those most likely to become the first line of defense in a crisis or mass casualty situation could be taught to task, condition, and standard a tourniquet given a two-hour block of instruction.

- The goals outlined in the Hartford Consensus were used as a benchmark against which to measure accomplishments of the program.
- Stop the Bleeds program content and process for certifying instructors were examined.
- Numerous interviews were conducted with subject matter experts within and outside of the medical field.
- Multiple different tourniquets and methods for hemorrhage control were reviewed.
- Military training programs were used as a source for comparison.

Discussion & Conclusion, cont.

- Tactical Combat Casualty Care (TCCC)
- National Association of Emergency Medical Technicians (NAEMT) collaborative effort

Discussion & Conclusion

Strengths

- UNC Trauma Team is widely recognized with 10 hospitals serving 100 different counties.
- Extend reach into community, training anyone with interest at no cost to participants or organizations.
- Material covers all pertinent topics with a logical progression.

Weaknesses

- Training requests.
- Volunteers: high turnover, less dependable, and cannot be increased easily to meet demand.
- Experience harder to come by with demand, limits rigor of training that can be set up for instructor certification.
- Promotes certification to instructor level with little to no discretion.
- Content does not include:
  - Undoing tourniquet from redirect buckle
  - Expected number of rotations for proper application of a CAT
  - Placement of tourniquet on extremity
  - Marking patient and informing EMS provider of tourniquet placement

Weaknesses, cont.

- Common mistakes not discussed:
  - Not pulling slack out of tourniquet before tightening
  - Using a tourniquet for minimal bleeding
  - Applying too proximal when wound is in sight
  - Must stop bleeding AND eliminate distal pulse
  - Continually reassessing the casualty

  Opportunities

- Increased public awareness to mass casualty situations.
- Tourniquets are an easy and effective means of massive hemorrhage control.
- Program has lifesaving potential and can be taught to almost any age or ability.
- Extends basic medical knowledge to potential bystanders.

  Threat

- No formalized process for assessing and certifying participants.
- Participants may have false sense of confidence.
- Perceived political tension around tourniquets and the second amendment.
- Poor public perception of tourniquets.