Remote Damage Control Resuscitation – A Military Perspective

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“We sleep safe in our beds because rough men stand ready in the night to visit violence on those who would do us harm.”

George Orwell

Casualty Epidemiology

- 20% combat casualties KIA
- 50% KIA's die of exsanguination
  - 25% KIA's die 10-60 minutes after wounding (potentially salvageable group)
    - 83-87% potentially preventable deaths are secondary to hemorrhage
      - Of these deaths 50% are due to non-compressible hemorrhage from truncal injury
      - Truncal injuries make up ~15% total casualties and 12% of all admissions with a BD <5

Bellamy, RF. Mil Med 1984

Martin M, et al. J Trauma 2009

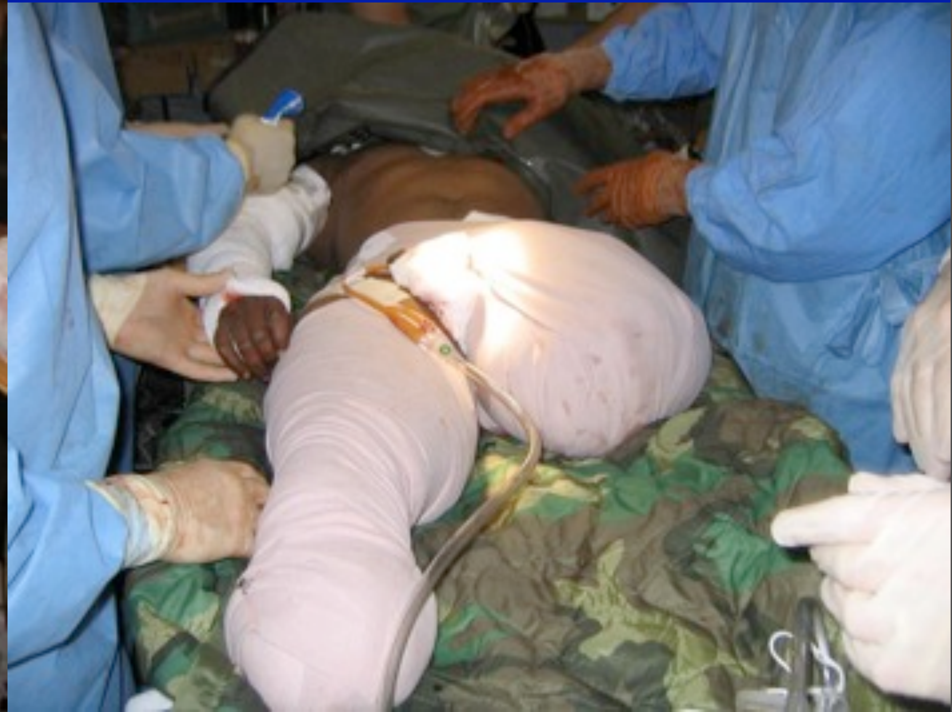
Kelly J, et al. J Trauma 2008

Fundamental Approach

- Most all would agree that the tenants of TCCC should be adhered to
- Minimal time doing anything other than life-saving interventions – scoop and run (USA Dust-off/USAF Pedro) vice scoop, run and play (UK MERT)
- Truly need to be thinking in terms of time to definitive surgical intervention

Key Concepts

- Hypotensive resuscitation per TCCC guidelines
  - Radial pulse and normal mentation = no IV access; no fluids en-route
  - Absence of above – casualty receives 500cc Hextend; maybe repeated in 30 min if no improvement for a total of 1L Hextend
  - TXA for those anticipated needing MT
- Identify the critically injured early – not always that easy



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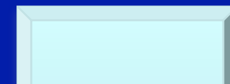
Evacuation time – 15’



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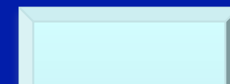

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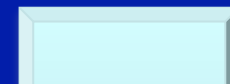

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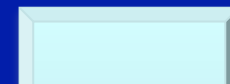

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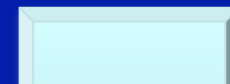

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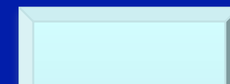

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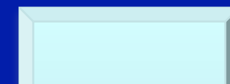

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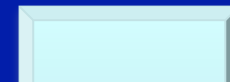

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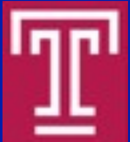

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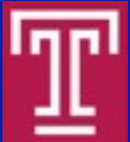

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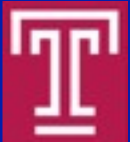

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Final Thoughts

- Need to have situational awareness regarding time to definitive surgical intervention
- Blood and blood product usage is important in the critically wounded/ injured
- Need to provide clear and concise guidance to medics/corpsmen