Conflicts of Interest

None.

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Disclaimer

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Background

Multiple previously published reports showing low adherence to TCCC guidelines
  » Consistent across all our analyses → analgesia, wound prophylaxis
  » Unclear effects of TCCC on actual prehospital practices

Analgesia guideline changes occurred during the recent conflicts
  » Ketamine added to the TCCC guidelines in 2012
  » OTFC authorized for theater ordering in 2011 (recommended back in 2006)
  » IM morphine has been out of guidelines since before Iraq and Afghanistan conflicts…yet still persists in the supply chain

Methods

Ethics
  » Submitted protocol → USAISR regulatory office determined it to be exempt
  » Sub-analysis of previously published data

Casuaty data
  » Searched the DoD Trauma Registry using a series of ED procedure codes to isolate casualties that required at least one ED intervention upon arrival
  » Requested all prehospital and relevant hospital-based data for the overall dataset

Goal → Analyze effects of guideline changes on prehospital practices
Methods

Periods of Analyses
» Pre-ketamine era (2007-2012), post-ketamine era (2013-2016)
» Pre-OTFC era (2007-2011), post-OTFC era (2012-2016)
» Post-IM morphine era (2007-2016)

Goal → Analyze effects of TCCC and theater guideline changes on prehospital practices

Results

» Pre-defined search codes captured 28222 casualties from January 2007 to August 2016
» 8978 casualties had documentation of IM morphine (2.1%), IV morphine (2.1%), OTFC, IV/IM fentanyl (8.9%), and/or ketamine (all routes, 5.4%)
Results

» Ketamine use
  » Pre-era 3.9% (995 out of 25618 encounters)
  » Post-era 19.8% (515 out of 2604, p<0.001)

» OTFC use
  » Pre-era 0.7% (163 out of 22815)
  » Post-era 7.9% (427 out of 5407, p<0.001)

Conclusions

» Ketamine use rose significantly before and after
» OTFC use rose significantly before and after
» IM morphine use appears to be relatively stable
» TCCC and theater-level guidance changes appear to have a notable impact on use overall

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The End

Questions?
Comments?
Feedback?

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