JOURNAL of SPECIAL OPERATIONS MEDICINETM

Spring 2014 Volume 14, Edition 1

THE JOURNAL FOR OPERATIONAL MEDICINE AND COMBAT CASUALTY CARE



- > Case Report: Far Forward Fresh Whole Blood Transfusion
- > Case Report: Treating Combat Burns With Silver-Nylon Dressing
- > A Triple-Option Analgesia Plan for TCCC: TCCC Guidelines Change 13-04
- > Emergency Thigh Tourniquet Effectiveness in Four Positions
- > ReSTART: Resource-Based Triage in Mass-Casualty Events
- > Prehospital Cadaver Study of Junctional Emergency Tourniquet Tool
- > Design Rationale of the Cric-Key and Cric-Knife
- > Contingency Telemedical Support: The EM-ANGEL Study
- > Articulating Traction Splint Use on Pulseless Forearm Fracture
- > Optimizing Vitamin D Status to Enhance Physical and Cognitive Performance
- > Operational Stressors on Physical Performance in Special Operators
- > Effects of IO and IV Administration of Hextend
- > Surveillance for Vector-borne Diseases in Dogs in Colombia

Dedicated to the Indomitable Spirit and Sacrifices of the SOF Medic

All articles published in the Journal of Special Operations Medicine are protected by United States copyright law and may not be reproduced, distributed, transmitted, displayed, or otherwise published without the prior written permission of Breakaway Media, LLC. Contact Editor@JSOMonline.org.

TCCC UPDATES



TCCC Abstracts

Tactical Combat Casualty Care Journal Article Abstracts Janury 2014

or the full CoTCCC recommended abstracts of the following references, please go to the TCCC page on the JSOM website at https://www.jsomonline.org/TCCC.html.

References

Akoglu H, Akoglu E, Evman S, et al. Determination of the appropriate catheter length and place for needle thoracostomy by using computed tomography scans of pneumothorax patients. *Injury*. 2013;44:1177–1182.

Annane D, Siami S, Jaber S, et al. Effects of fluid resuscitation with colloids vs crystalloids on mortality in critically ill patients presenting with hypovolemic shock: the CRISTAL randomized trial. *JAMA*. 2013;310:1809–1817.

Anonymous: Abdominal aortic tourniquet use in Afghanistan. J Spec Oper Med. 2013;13:1-2.

Bailey J, Morrison J, Rasmussen T. Military trauma system in Afghanistan: lessons for civil systems? Curr Opin Crit Care. 2013;19:569–577.

Blanca-López N, Ariza A, Doña I, et al. Hypersensitivity reactions to fluoroquinolones: analysis of the factors involved. *Clin Exp Allergy*. 2013;43:560–567.

Bogner J, Kutaiman A, Esguerra-Alcalen M, et al. Moxifloxacin in complicated skin and skin structure infections (cSSis): a prospective, international, non-interventional, observational study. *Adv Ther.* 2013;30:630–643.

Brunstetter T, Wasner C, Hart S, Burrow S. Rigid eye shields: a critical gap in the individual first aid kit. *J Spec Oper Med*. 2013;13:26–28.

Buschmann C, Kleber C. No more tension pneumothorax in unsuccessfully resuscitated patients with penetrating chest trauma at autopsy! *Injury*. 2013;44:1659–1660.

Butler F, Dubose J, Otten E, et al. Management of open pneumothorax in Tactical Combat Casualty Care: TCCC Guidelines changed 13-02. *J Spec Oper Med*. 2013;13:81–86.

Bux J, Dickhörner D, Scheel E. Quality of freeze-dried (lyophilized) quarantined single-donor plasma. *Transfusion*. 2013. Epub ahead of print.

Cannon M. Law enforcement and the long gun: do we need a new face in the fight? J Emerg Med. 2013. Epub ahead of print.

Caterson E, Carty M, Weaver M, Holt E. Boston bombings: a surgical view of lessons learned for combat casualty care and the applicability to Boston's terrorist attack. *J Craniofac Surg.* 2013;24:1061–1067.

Chen C, Ming C, Ma C, et al. Prespective, randomized, study of ampicillin-sulbactam versus moxifloxacin monotherapy for the treatment of community-acquired complicated intra-abdominal infections. *Surg Infect.* 2013;14:389–396.

Croushorn J, Thomas G, McCord SR. Abdominal aortic tourniquet controls junctional hemorrhage from a gunshot wound of the axilla. *J Spec Oper Med.* 2013;13:1–4.

Duckett J, Fell P, Han K, et al. Introduction of the I-gel supraglottic airway device for prehospital airway management in a UK ambulance service. *Emerg Med J.* 2013. Epub ahead of print .

Duggan M, Rago A, Sharma U, et al. Self-expanding polyurethane polymer improves survival in a model of noncompressible massive abdominal hemorrhage. *J Trauma Acute Care Surg.* 2013;74:1462–1467.

Filanovsky Y, Miller P, Kao J. Myth: Ketamine should not be used as an induction agent for intubation in patients with head injury. CJEM. 2010;12:154–157.

Filips D, Logsetty S, Tan J, et al. The iTClamp controls junctional bleeding in a lethal swine exsanguination model. *Prehosp Emerg Care*. 2013. Epub ahead of print.

- Galante J, Smith C, Sena M, et al. Identification of barriers to adaptation of battlefield technologies into civilian trauma in California. *Mil Med.* 2013;178:1227–1230.
- Gebauer S, Hoopes D, Finlay E. From the battlefield to the palliative care arsenal: application of QuickClot[®] Combat Gauze[™] for aggressive palliation of hemorrhagic shock in the setting of end-stage liver disease-associated compartment syndrome. *J Pain Symptom Manage*. 2013;46:e6–e8.
- Gillies M, Habicher M, Jhanji S, et al. Incidence of postoperative death and acute kidney injury associated with IV hydroxyethyl starch use: systematic review and meta-analysis. *Br J Anaesth*. 2013. Epub ahead of print.
- Glassberg E, Nadler R, Rasmussen TE, et al. Point-of-injury use of reconstituted freeze-dried plasma as a resuscitative fluid: a special report for prehospital trauma care. *J Trauma Acute Care Surg.* 2013;75:S111–S114.
- Glassberg E, Lipsky A, Abramovich A, et al. A dynamic mass casualty incident at sea: lessons learned for the Mavi Marmara. *J Trauma Acute Care Surg.* 2013;75:292–297.
- Goliasch G, Ruetzler A, Fischer H, et al. Evaluation of advanced airway management in absolutely inexperienced hands: a randomized manikin trial. *Eur J Emerg Med.* 2013;20:310–314.
- Gruen R, Brohi K, Schreiber M, et al. Haemorrhage control in severely injured patients. Lancet. 2012;380:1099-1108.
- Grumbo R, Hoedebecke K, Berry-Cabán C, Mazur A. MEDEVAC use of ketamine for postintubation transport. *J Spec Oper Med.* 2013;13:36–41.
- Hess J, Lelkens C, Holcomb J, Scalea T. Advances in military, field, and austere transfusion medicine in the last decade. *Transfus Apher Sci.* 2013. Epub ahead of print.
- Jacobs L, Wade D, McSwain N, et al. The Hartford Consensus: THREAT, a medical disaster preparedness concept. *J Am Coll Surg.* 2013;17:947–953.
- Jacobs L, McSwain N, Rotonda M, et al. Improving survival from active shooter events: the Hartford Consensus. *J Trauma Acute Care Surg.* 2013;74:1399–1400.
- Jänig C, Marquardt S, Dietze T, Nitsche T. Laryngeal tube placement of manikin by laypersons: is there a possibility for "public access airway management"? Eur J Emerg Med. 2013. Epub ahead of print.
- Katzenell U, Lipsky A, Abramovich A, et al. Prehospital intubation success rates among Israeli Defense Force providers: epidemiologic analysis and effect on doctrine. *J Trauma Acute Care Surg.* 2013;75:S178–S183.
- Keneally R, Szpisjak D. Thoracic trauma in Iraq and Afghanistan. J Trauma Acute Care Surg. 2013;74:1292–1297.
- Kheirabadi B, Terrazas I, Koller A, et al. Vented versus unvented chest seals for treatment of pneumothorax and prevention of tension pneumothorax in a swine model. *J Trauma Acute Care Surg.* 2013;75:150–156.
- Kilic T, Goksu E, Durmaz D, Yildiz G; Upper cervical spine movement during intubation with different intubation with different airway devices. *Am J Emerg Med*. 2013. Epub ahead of print.
- Kim B, Zielinski M, Jenkins D, et al. The effects of prehospital plasma on patients with injury: a prehospital plasma resuscitation. *J Trauma Acute Care Surg.* 2012;73:S49–S53.
- Kotora J, Henao J, Littlejohn L, Kircher S. Vented chest seals for prevention of tension pneumothorax in a communicating pneumothorax. *J Emerg Med.* 2013;45:686–694.
- Kragh J, Burrows S, Wasner C, et al. Analysis of recovered tourniquets from casualties of Operation Enduring Freedom and Operation New Dawn. *Mil Med.* 2013;178:806–810.
- Kragh J, Walters T, Westmoreland T, et al. Tragedy into drama: an American history of tourniquet use in the current. *J Spec Oper Med.* 2013;13:5–25.
- Kunio N, Riha G, Watson K, et al. Chitosan-based advanced hemostatic dressing is associated with decreased blood loss in a swine uncontrolled hemorrhage model. *Am J Surg.* 2013. Epub ahead of print.
- Lawnick M, Champion H, Gennarelli T, et al. Combat injury coding: a review and reconfiguration. *J Trauma Acute Care Trauma*. 2013;75:573–581.
- Lee T, Watson K, Fabricant L, et al. Hyperosmolar reconstituted lyophilized plasma is an effective low-volume hemostatic resuscitation fluid for trauma. *J Trauma Acute Care Surg.* 2013;75:369–375.
- Li Z, Fu X, Xing D, et al. Is tranexamic acid effective and safe in spinal surgery? A meta-analysis of randomized controlled trials. *Eur Spine J.* 2013. Epub ahead of print.
- Lipsky A, Abramovich A, Nadler R, et al. Tranexamic acid in the prehospital setting: Israeli Defense Forces' initial experience. *Injury.* 2013. Epub ahead of print.
- Mabry R, Nichols M, Shiner D, et al. A comparison of two open surgical cricothyroidotomy techniques by military medics using a cadaver model. *Ann Emerg Med.* 2013. Epub ahead of print.
- McMullen J, Rodriquez D, Hart K, et al. Prevalence of prehospital hypoxemia and oxygen use in trauma. *Mil Med.* 2013;178:1121–1125.
- McSwain N. Judgment based on knowledge: a history of Prehospital Trauma Life Support, 1970–2013. *J Trauma Acute Care Surg.* 2013;75:1–7.
- Metzger A, Rees J, Segal N, et al. "Fluidless" resuscitation with permissive hypotension via impedance threshold device therapy compared with normal saline resuscitation in a porcine model of severe hemorrhage. *J Trauma Acute Care Surg.* 2013; 75:S203–S209.
- Millin M, Galvagno S, Khandker S, et al. Withholding and termination of resuscitation of adult cardiopulmonary arrest secondary to trauma: resource document to the joint NAEMSP-ACSCOT position statement. *J Trauma Acute Care Surg.* 2013; 75:459–467.

- Misgav M, Kenet G, Martinowitz U. Chitosan-based dressing for the treatment of external/accessible bleeding in children with bleeding tendency. *J Pediatr Hematol Oncol.* 2013. Epub ahead of print.
- Morrison J, Stannard A, Rasmussen T, et al. Injury pattern and mortality of noncompressible torso hemorrhage in UK combat casualties. *J Trauma Acute Care Surg.* 2013;75:S263–S268.
- Muniz G, Wampler D, Manifold C, et al. Promoting early diagnosis of hemodynamic instability during simulated hemorrhage with the use of a real-time decision-assist algorithm. *J Trauma Acute Care Surg.* 2013;73:S184–S189.
- Myburgh JA, Mythen MG. Resuscitation fluids. N Engl J Med. 2013;369:1243-1251.
- Nakstad A, Bredmose P, Sandberg M. Comparison of percutaneous device and the bougie-assisted surgical technique for emergency cricothyrotomy: an experimental study on a porcine model performed by air ambulance anaesthesiologists. *Scand J Trauma Resusc Emerg Med.* 2013;21:59.
- Nessen S, Eastridge B, Cronk D, et al. Fresh whole blood use by forward surgical teams in Afghanistan is associated with improved survival compared to component therapy without platelets. *Transfusion*. 2013;53:107S–113S.
- Polston R, Clumpner B, Kragh J, et al. No slackers in tourniquet use to stop bleeding. J Spec Oper Med. 2013;13:12–19.
- Rasmussen K, Johansson P, Højskov M, et al. Hydroxyethyl starch reduces coagulation competence and increases blood loss during major surgery: results from a randomized controlled trial. *Ann Surg.* 2013. Epub ahead of print.
- Robinson B, Cotton B, Pritts T, et al. Application of the Berlin definition in PROMMTT patients: the impact of resuscitation on the incidence of hypoxemia. *J Trauma Acute Care Surg.* 2013;75:S61–S67.
- Rush S. Recent consideration in tactical medicine. J Spec Oper Med. 2013;13:54-58.
- Singleton J, Gibb I, Bull A, et al. Primary blast lung injury prevalence and fatal injuries from explosions: insights from postmortem computed tomographic analysis of 121 improvised explosive device fatalities. *J Trauma Acute Care Surg.* 2013;75:S269–S274.
- Singleton J, Gibb I, Hunt N, et al. Identifying future 'unexpected' survivors: a retrospective cohort study of fatal injury patterns in victims of improvised explosive devices. *BMJ Open.* 2013;8:e003130.
- Smit K, Naudie D, Ralley F, et al. One dose of tranexamic acid is safe and effective in revision knee arthroplasty. *J Arthroplasty*. 2013. Epub ahead of print.
- Stahel P, Mauffrey C, Smith W, et al. External fixation for acute pelvic ring injuries: decision making and technical options. J Trauma Acute Care Surg. 2013;882–887.
- Strain J. CBRNE TC3: A hybrid approach to casualty care in the CBRNE environment. J Spec Oper Med. 2013;13:44–53.
- Studer N, Horn G, Studer L, et al. Feasibility of supraglottic airway use by combat lifesavers on the modern battlefield. *Mil Med.* 2013;178:1202–1207.
- Taylor D, Coleman M, Parker P. The evaluation of an abdominal aortic tourniquet for the control of pelvic and lower limb hemorrhage. *Mil Med.* 2013;178:1196–1201.
- Van Sickle C, Schafer K, Mulligan J, et al. A sensitive shock index for real-time patient assessment during simulated hemorrhage. *Aviat Space Environ Med*. 2013;84:907–912.
- Voscopoulos C, Barker T, Listwa T, et al. A comparison of the speed, success rate, and retention of rescue airway devices placed by first-responder emergency medical technicians: a high-fidelity human patient simulation study. *J Emerg Med.* 2013; 44:784–789.
- Vu E, Schlamp R, Wand R, et al. Prehospital use of tranexamic acid for hemorrhagic shock in primary and secondary air medical evacuation. *Air Med J.* 2013;32:289–292.
- Weppner J. Improved mortality from penetrating neck and maxillofacial trauma using Foley catheter balloon tamponade in combat. J Trauma Acute Care Surg. 2013;75:220–224.

TCCC Updates 115