



Scientific Papers That Should Have Changed Your Practice Part IV
Critical Care Surgery
Amy McDonald, MD

27th EAST Annual Scientific Assembly
Wednesday, January 15, 2014
4:00 pm-5:30 pm

A randomized trial of glutamine and antioxidants in critically ill patients.

Heyland D, Muscedere J, Wischmeyer PE, Cook D, Jones G, Albert M, Elke G, Berger MM, Day AG;
Canadian Critical Care **Trials** Group.
N Engl J Med. 2013 Apr 18;368(16):1489-97.

Association of hydroxyethyl starch administration with mortality and acute kidney injury in critically ill patients requiring volume resuscitation: a systematic review and meta-analysis.

Zarychanski R, Abou-Setta AM, Turgeon AF, Houston BL, McIntyre L, Marshall JC, Fergusson DA.
JAMA. 2013 Feb 20;309(7):678-88.

Benzodiazepine versus nonbenzodiazepine-based sedation for mechanically ventilated, critically ill adults: a systematic review and meta-analysis of randomized trials.

Fraser GL, Devlin JW, Worby CP, Alhazzani W, Barr J, Dasta JF, Kress JP, Davidson JE, Spencer FA.
Crit Care Med. 2013 Sep;41(9 Suppl 1):S30-8.

Procalcitonin as a diagnostic marker for sepsis: a systematic review and meta-analysis.

Wacker C, Prkno A, Brunkhorst FM, Schlattmann P.
Lancet Infect Dis. 2013 May;13(5):426-35.

Prone positioning in severe acute respiratory distress syndrome.

Guérin C, Reignier J, Richard JC, Beuret P, Gacouin A, Boulain T, Mercier E, Badet M, Mercat A, Baudin O, Clavel M, Chatellier D, Jaber S, Rosselli S, Mancebo J, Sirodot M, Hilbert G, Bengler C, Richecoeur J, Gainnier M, Bayle F, Bourdin G, Leray V, Girard R, Baboi L, Ayzac L; PROSEVA Study Group.
N Engl J Med. 2013 Jun 6;368(23):2159-68

Effect of daily chlorhexidine bathing on hospital-acquired infection.

Climo MW, Yokoe DS, Warren DK, Perl TM, Bolon M, Herwaldt LA, Weinstein RA, Sepkowitz KA, Jernigan JA, Sanogo K, Wong ES.
N Engl J Med. 2013 Feb 7;368(6):533-42.



**Scientific Papers That Should Have Changed Your Practice Part IV
Emergency General Surgery
Thomas Esposito, MD, MPH**

**27th EAST Annual Scientific Assembly
Wednesday, January 15, 2014
4:00 pm-5:30 pm**

1. Austin MT, et al: Creating an Emergency General Surgery Service Enhances the Productivity of Trauma Surgeons, General Surgeons and the Hospital. J. Trauma, 2005, 58:906-910
2. Pryor JP, et al: Integrating Emergency General Surgery with a Trauma Service: Impact on the Care of Injured Patients. J. Trauma, 2004; 57:467-473.
3. Earley, AS, et al: An Acute Care Surgery Model Improves Outcomes in Patients with Appendicitis. Ann Surg. 2006, 244:498-504.
4. Britt RC, et al: Impact of Acute Care Surgery on Biliary Disease. J. Am. Coll Surg. 2006, 210:595-601.
5. Byrge N, Barson RG, Ennis TM, Nirula R: Laparoscopic vs. Open Repair of Perforated Gastroduodenal Ulcer: A NSQIP Analysis. American Journal of Surgery 2013, 6:957-963.
6. Bertleff M, Halm J, Bemelmen W, et al: Randomized Clinical Trial of Laparoscopic vs Open Repair of the Perforated Peptic Ulcer: The LAMA Trial. World Journal of Surgery 2009, 33:1368-1373.
7. Ansaloni L, Anderosn R, Bazzoli F, et al: Guidelines in the Management of Obstructing Cancer of the Left Colon: Consensus Conference of the World Society of Emergency Surgery (WSES) and Peritoneum and Surgery (PnS) Society World Journal of Emergency Surgery 2010, 5:29.
8. Faraklas I, Stoddard G, Neumayer L, Cochran A: Development and Valication of a Necrotizing Soft Tissue Infection Mortality Risk Calculator Using NSQIP. JACS 2013, 217: 153-161.



Scientific Papers That Should Have Changed Your Practice Part IV
Trauma
Bryan Cotton, MD, MPH

27th EAST Annual Scientific Assembly
Wednesday, January 15, 2014
4:00 pm-5:30 pm

1. Cureton E, Yeung LY, Kwan RO, et al. The heart of the matter: Utility of ultrasound of cardiac activity during traumatic arrest. *J Trauma Acute Care Surg*. 2012;73: 102-110.
2. Simms ER, Flaris AN, Franchino X, et al. Bilateral anterior thoracotomy (clamshell incision) is the ideal emergency thoracotomy incision: An anatomic study. *World J Surg* 2013; 37:1277–1285.
3. Morrison JJ, Percival TJ, Markov NP et al. Aortic balloon occlusion is effective in controlling pelvic hemorrhage. *J Surg Research* 2012; 177: 341-347.
4. Brenner ML, Moore LM, DuBose JJ, et al. A clinical series of resuscitative endovascular balloon occlusion of the aorta for hemorrhage control and resuscitation. *J Trauma Acute Care Surg*. 2013;75: 506-511.
5. Stannard A, Morrison JJ, Sharon DJ, et al. Morphometric analysis of torso arterial anatomy with implications for resuscitative aortic occlusion. *J Trauma Acute Care Surg*. 2013;75: S169-172.
6. Holcomb JB, del Junco DJ, Fox EE, et al. The Prospective, Observational, Multicenter, Massive Transfusion Study, PROMMTT: Comparative effectiveness of a time-varying treatment and competing risks. *JAMA Surg* 2013; 148(2):127-136.
7. del Junco DJ, Holcomb JB, Fox EE, Resuscitate early with plasma and platelets or balance blood products gradually: Findings from the Prospective, Observational, Multicenter, Major Trauma Transfusion (PROMMTT). *J Trauma Acute Care Surg* 2013;75:S24-S30.
8. AABB. TRALI Risk Reduction Requirements in the 29th Edition of BBTS Standards. Accessed on-line August 21, 2013.
<http://www.aabb.org/sa/standards/Pages/trali-requirements-bbts-standards.aspx>.
9. Radwan ZA, Matijevic N, Podbielski J, et al. An emergency department thawed plasma protocol decrease blood component utilization and improves survival in severely injured patient. *JAMA Surg* 2013; 148(2):170-175.
10. Mehr CR, Gupta R, von Recklinghausen FM, et al. Balancing risk and benefit: Maintenance of a thawed Group A plasma inventory for trauma patients requiring massive transfusion. *J Trauma Acute Care Surg*. 2013;74: 1425-1431.
11. Zielinski MD, Johnson PM, Jenkins D, et al. Emergency use of prethawed Group A plasma in trauma patients. *J Trauma Acute Care Surg*. 2013;74: 69-75.

12. Matijevic N, Wang YW, Cotton BA, et al. Better hemostatic profiles of never frozen liquid plasma compared to thawed fresh frozen plasma. *J Trauma Acute Care Surg*. 2013;74: 84-91.
13. Gosselin RC, Marshall C, Dwyre DM, et al. Coagulation profile of liquid-state plasma. *Transfusion*. 2013;53:579-590.
14. Holcomb JB, Minei KM, Scerbo ML, et al. Admission rapid thrombelastography (r-TEG) can replace conventional coagulation tests in the emergency department: Experience with 1974 consecutive trauma patients. *Ann Surg* 2012; 256(3): 476-86.
15. McCully SP, Fabricant LJ, Kunio NR, et al. The International Normalized Ratio overestimates coagulopathy in stable trauma and surgical patients. *J Trauma Acute Care Surg*. 2013;75: 947-953.
16. The CRASH-2 Investigators. The importance of early treatment with tranexamic acid in bleeding trauma patients: an exploratory analysis of the CRASH-2 randomised controlled trial. *Lancet* 2011; 377: 1096-101.
17. Morrison JJ, Dubose JJ, Rasmussen TE, Midwinter MJ. Military Application of Tranexamic Acid in Trauma Emergency Resuscitation (MATTERs) Study. *Arch Surg* 2012;147:113-9.
18. Cotton BA, Harvin JA, Kostousouv V, et al. Hyperfibrinolysis on admission is an uncommon but highly lethal event associated with shock and pre-hospital fluid administration. *J Trauma* 2012; 72(2): 365-370.
19. Chapman MP, Moore EE, Ramos CR et al. Fibrinolysis greater than 3% is the critical value for initiation of antifibrinolytic therapy. *J Trauma Acute Care Surg*. 2013;75: 961-967.
20. Young JB, Utter GH, Schermer CR, et al. Saline versus Plasma-Lyte A in initial resuscitation of trauma patients: A randomized trial. *Ann Surg* 2014;259(2):255-62.
21. DuBose JJ, Scalea TM, Holcomb JB et al. Open abdominal management after damage-control laparotomy for trauma: A prospective observational American Association for the Surgery of Trauma multicenter study. *J Trauma Acute Care Surg* 2013;74: 113-122.
22. Ghneim MH, Regner JL, Jupiter DC, et al. Goal directed fluid resuscitation decreases time for lactate clearance and facilitates early fascial closure in damage control surgery. *Am J Surg* 2013; 206: 995-1000.
23. Frazee RC, Abernathy SW, Jupiter DC, Smith RW. The number of operations negatively influences fascia closure in open abdomen management. *Am J Surg* 2012; 204: 996-999.
24. Fox N, Crutchfield M, LaChant M, et al. Early abdominal closure improves long-term outcomes after damage-control laparotomy. *J Trauma Acute Care Surg* 2013;75: 854-858.
25. Burlew CC, Moore EE, Biffl WL, et al. One hundred percent fascial approximation can be achieved in the postinjury open abdomen with a sequential closure protocol. *J Trauma*. 2012;72: 235-241.
26. Harvin JA, Mims MM, Wade CE, et al. Chasing 100%: The use of hypertonic saline to improve early fascial closure rates following damage control laparotomy *J Trauma Acute Care Surg*. 2013; 74: 426-32.
27. <http://www.cardiachealth.org/fatalities-dabigatran-and-warfarin-caused-bleeding>
Accessed on-line December 22, 2013.

28. Eikelboom JW, Connolly SJ, Brueckmann, et al. Dabigatran versus warfarin in patients with mechanical heart valves. *N Engl J Med* 2013;369:1206-14.
29. Sørensen R, Gislason G, Torp-Pedersen C, et al. Dabigatran use in Danish atrial fibrillation patients in 2011: A nationwide study. *BMJ Open* 2013;3:e00275.
30. Kaatz S, Kouides PA, Garcia DA, et al. Guidance on the emergent reversal of oral thrombin and factor Xa inhibitors. *Am. J. Hematol.* 87:S141–S145, 2012.