

Carl Andrew Beyer, M.D.

Major, USAF, MC

2335 Stockton Boulevard, Room 5107, Sacramento, CA 95817

RESEARCH

Peer-Reviewed Publications

1. Yamashiro KJ, Galganski LA, Grayson JK, **Beyer CA**, et al. Resuscitative Endovascular Balloon Occlusion of the Aorta (REBOA) in a Pediatric Swine Model: Is 60 Minutes Too Long? *J Trauma Acute Care Surg*. 2020 February. [Epub ahead of print]
2. **Beyer CA**, Poltavskiy E, Walker LE, Pettey W, et al. Persistent Opioid Use After Combat Injury and Subsequent Long-term Risk of Abuse: A Retrospective Cohort Study. *Annals of Surgery*. 2019 November. [Epub ahead of print]
3. **Beyer CA**, Hoareau GL, Kashtan HW, Wishy AM, et al. Resuscitative endovascular balloon occlusion of the aorta in a swine model of hemorrhagic shock and blunt thoracic injury. *Euro J Trauma*. 2019 October. [Epub ahead of print]
4. Spruce MW, **Beyer CA**, Caples CM, DeSoucy ES, et al. Pharmacokinetics of Tranexamic Acid Given as an Intramuscular Injection Compared to Intravenous Infusion in a Swine Model of Ongoing Hemorrhage. *Shock*. 2020;53(6):754-760.
5. Kashtan HW, Simon MA, **Beyer CA**, Wishy A, et al. Effects of Extended Lower Extremity Cooling Following Zone 3 REBOA in a Porcine Hemorrhage Model. *Military Medicine*. 2020;185(S1):42-49.
6. Johnson MA, Hoareau GL, **Beyer CA**, Caples CA, et al. Not Ready for Prime Time: Intermittent versus Partial REBOA for Prolonged Hemorrhage Control in a Highly Lethal Porcine Injury Model. *J Trauma Acute Care Surg*. 2020;88(2):298-304.
7. Yamashiro KJ, Wishy AM, **Beyer CA**, Kashtan HW, et al. Resuscitative endovascular balloon occlusion of the aorta (REBOA) in a pediatric swine liver injury model: A pilot study. *J Ped Surg*. 2020;55(2):346-352.
8. Hoareau GL, Barthélemy A, Goy-Thollot I, **Beyer CA**, et al. Reference Intervals for and the Effects of Sample Handling and Sex on Rotational Thromboelastometry in Healthy Adult Pigs. *J Am Assoc Lab Anim Sci*. 2020;59(3):322-327.
9. **Beyer CA**, Burmeister DM, Gomez BI, Tercero J, et al. Point-of-Care Urinary Biomarker Testing for Risk Prediction in Critically Injured Combat Casualties. *J Am Coll Surg*. 2019;229(5):508-515.
10. **Beyer CA**, Hoareau GL, Tibbits EM, Davidson AJ, et al. Resuscitative Endovascular Balloon Occlusion of the Aorta Induced Myocardial Injury is Mitigated by Endovascular Variable Aortic Control. *J Trauma Acute Care Surg*. 2019;87(3):590-598.
11. Walker LE, Poltavskiy E, Janak JC, **Beyer CA**, et al. Military Service and Racial/Ethnic Differences in Cardiovascular Disease: An Analysis of the 2011-2016 Behavioral Risk Factor Surveillance System. *Ethnicity and Disease*. 2019;29(3):451-462.

12. Hoareau GL, Tibbits EM, **Beyer CA**, Simon MA, et al. Resuscitative Endovascular Balloon Occlusion of the Aorta: Review of the Literature and Applications to Veterinary Emergency and Critical Care. *Front Vet Sci*. 2019;6:197.
13. **Beyer CA**, Johnson MA, Galante JM, DuBose JJ. Zones matter: Hemodynamic effects of zone 1 vs zone 3 resuscitative endovascular balloon occlusion of the aorta placement in trauma patients. *Injury*. 2019;50(4):855-858.
14. Hamrick KL, **Beyer CA**, Lee JA, Cocanour CS, Duby JJ. Multimodal Analgesia and Opioid Use in Critically Ill Trauma Patients. *J Am Coll Surg*. 2019;228(5):769-775.
15. Hoareau GL, **Beyer CA**, Wilson C, Kashtan H, et al. Extracorporeal potassium binding for the management of hyperkalemia in an anephric model of crush injury. *J Trauma Acute Care Surg*. 2019;86(4):694-701.
16. Hoareau GL, **Beyer CA**, Walker LE, Chung KK, Stewart IJ. Renal Replacement Therapy Capability for the Treatment of Combat-Associated Acute Kidney Injury: A Historical Perspective to Plan for Future Conflicts. *Military Medicine*. 2019;184(3-4):81-83.
17. Hoareau GL, Kashtan H, Walker LE, **Beyer CA**, et al. A Novel Perfusion System for Damage Control of Hyperkalemia in Swine. *Shock*. 2018;50(6):677-683.
18. **Beyer CA**, Zakaluzny S, Humphries M, Shatz D. Multidisciplinary Management of Blunt Renal Artery Injury with Endovascular Therapy in the Setting of Polytrauma: A Case Report and Review of the Literature. *Annals of Vascular Surgery*. 2017;38:318.
19. Taghavi S, **Beyer CA**, Vora H, Jayarajan SN, et al. Noncardiac Surgery in Patients on Mechanical Circulatory Support. *ASAIO Journal*. 2014;60(6):670-674.

Podium Presentations

1. Risk Factors For Persistent Opioid Use And Clinically Recognized Opioid Abuse Following Battle Injury In United States Military Personnel. Military Health System Research Symposium, Young Investigator Competition. Kissimmee, FL, August 2019.
2. Resuscitative Endovascular Balloon Occlusion of the Aorta Induced Cardiac Injury Is Mitigated by Partial Occlusion. 30th Annual UC Davis Surgery Research Symposium. Sacramento, CA, April 2019.
3. Point-of-Care Urinary Biomarker Testing for Risk Prediction in Critically Injured Combat Casualties. Excelsior Surgical Society Annual Meeting. Boston, MA, October 2018.
4. Multidisciplinary Management of Blunt Renal Artery Injury with Endovascular Therapy in the Setting of Polytrauma. 46th Annual Meeting of the Western Trauma Association. Squaw Valley, CA, March 2016.

Poster Presentations

1. Resuscitative Endovascular Balloon Occlusion Of The Aorta Induced Myocardial Injury Is Mitigated By Endovascular Variable Aortic Control. Military Health System Research Symposium. Kissimmee, FL, August 2019.

2. Multimodal Analgesia Decreases Opioid Use in Critically Ill Trauma Patients. 30th Annual UC Davis Surgery Research Symposium. Sacramento, CA, April 2019.
3. Multimodal Analgesia Decreases Opioid Use in Critically Ill Trauma Patients. 77th Annual Meeting of the American Association for the Surgery of Trauma. San Diego, CA, September 2018.
4. Monitoring Pulmonary Contusion During Prolonged Field Care: A Pilot Study Comparing Ultrasound to Computed Tomography for Serial Imaging in a Porcine Trauma Model. Military Health System Research Symposium. Kissimmee, FL, August 2018.

Book Chapters

1. **Beyer CA**, Johnson MA. REBOA in Traumatic Brain Injuries. In: Hörer T, DuBose JJ, Rasmussen T, White JM, eds. Endovascular Resuscitation and Trauma Management. 1st Edition. New York: Springer International Publishing; 2019

HONORS & ACCOMPLISHMENTS

| | |
|------|--|
| 2019 | 3 rd Place, Young Investigator Competition, Military Health System Research Symposium |
| 2019 | 1 st Place, Resident Posters, 30 th Annual UC Davis Surgery Research Symposium |
| 2018 | 1 st Place, Resident Trauma Paper Competition, Committee on Trauma, Region 13 |
| 2018 | Excellence in Research Oral Presentation Award, 60 th Medical Group, Travis AFB |
| 2014 | Dr. Herman Brown Award in Surgery, Temple University School of Medicine |
| 2006 | Spring Tapping Class, Florida Blue Key Leadership Honorary, University of Florida |
| 2004 | Eagle Scout, Troop 77, Venice, FL |

MILITARY AWARDS & DECORATIONS

Air Force Outstanding Unit Award, with two oak leaf clusters
 Top Academic Officer Graduate Award, USAF COT Class 11-05, Maxwell AFB
 Briefing Excellence Award, USAF COT Class 11-05, Maxwell AFB