



US DEPARTMENT OF DEFENSE

BLAST INJURY RESEARCH PROGRAM COORDINATING OFFICE

Acute Management Surgery

The PROOVIT Registry Provides a Contemporary Picture of the Management of Vascular Injury

The PROspective Observational Vascular Injury Trial (PROOVIT) is a prospective, multi-center observational trial on the management of vascular trauma and is a sub-study of the larger National Coordinating Center for Trauma Research study. A recent review of the registry investigated the incidence of arterial injuries and hospital resource use for open surgical and endovascular management of these injuries (*Faulconer, Branco, Loja, et al., 2018*).

Data from patients with arterial injury not distal to the knee or elbow were included in the study (n = 1,143 patients from 22 Level I trauma centers). Of these injuries, 456 were in non-compressible regions. The majority of those injuries were from blunt trauma (n = 356, representing 64 percent of reviewed blunt injuries), and were primarily managed conservatively (46.1 percent) or through endovascular surgery (40.2 percent). In managing transection and partial transection injuries to non-compressible regions (n = 97 endovascular and 77 open surgery), endovascular surgery required significantly fewer packed red blood cell units and had significantly higher in-hospital survival rates than open surgery. However, endovascular therapy required significantly longer hospital stays than open surgery. As demonstrated through this study, the PROOVIT registry can provide information required to answer questions about optimal diagnosis and management of patients with vascular trauma, including much needed long-term outcome data.

This effort was managed by CDMRP and supported by the Trauma Clinical Research Repository Program with programmatic oversight from CCCR/JPC-6.

REFERENCES:

Faulconer, E. R., Branco, B. C., Loja, M. N., Grayson, K., Sampson, J., Fabian, T. C., . . . Dubose, J. J. (2018). Use of open and endovascular surgical techniques to manage vascular injuries in the trauma setting: A review of the American Association for the Surgery of Trauma PROspective Observational Vascular Injury Trial registry. *J Trauma Acute Care Surg*, 84(3), 411-417. doi:10.1097/TA.0000000000001776

