Editorial

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EndoVascular Resuscitation and Trauma Management (EVTM) – Where do we go?

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Endovascular solutions for both elective and acute vascular surgery continue to develop, with a significant shift in the volumes of endovascular versus open surgery as solutions for common vascular diseases (Swedvasc National Swedish Vascular Registry Data 2024, https://www.ucr.uu.se/swedvasc/om-swedvasc/om-swedvasc). One example of this trend is in the treatment of aortic aneurysm, where there has been a clear shift towards endovascular solutions with beneficial results and guideline recommendations both for acute and elective surgery [1]. Furthermore, there is evidence that an endovascular or minimally invasive approach for bleeding (and some vessel occlusions) might be a favorable first-hand solution for different situations [2,3,4]. The results are dramatic in the context of ruptured Abdominal Aortic Aneurysm (rAAA), descending aortic blunt trauma and dissections, as well as pelvic bleeding treatment. We can today treat all rAAA with endovascular and hybrid techniques with low exclusion rate as reported by our center in Sweden [5,6]. A multidisciplinary approach and collaboration are important factors in this work. The methods used for rAAA can be used in traumatic and non-traumatic bleeders, avoiding the need to open new cavities or to perform major surgery on fragile patients, and are an essential part of the EVTM concept [7]. The benefits become obvious when we look at embolization or endografts versus major surgery for gastrointestinal, pelvic, gynecological bleeders or iatrogenic vascular surgery [2]. This is also true for the treatment of iatrogenic vascular injuries. We have noticed that over the last 10 years we have rarely needed open surgery for injuries of the femoral or iliac artery, and we can solve most problems with a local anesthetic endovascular procedure or hybrid surgery. There were no femoral/iliac artery endograft occlusions in our center (data not yet published). This use of endovascular and hybrid methods might be a game changer for iatrogenic vascular injuries. It helps patients in need of fast, relatively simple methods, preventing morbidity and mortality, as well as decreasing patient suffering and costs, not to mention intensive care resources [8]. EVTM is not limited to trauma or bleeders but provides a platform for different endovascular and hybrid solutions for resuscitation [7].

There is much to do in the field of EVTM. Even if experience as mentioned on rAAA and thoracic blunt trauma or pelvic bleeders supports the use of endo methods, we need clear data on other traumatic and non-traumatic injuries, and further evidence of what are the best solutions for these patients. There is also much to learn and develop in endovascular methods for non-bleeding resuscitation. One example is the field of out-of-hospital cardiogenic circulatory collapse, where the survival rate is extremely low and the morbidity high. Endovascular methods have the potential to decrease mortality in these situations.

The JEVTM will continue working on the collection of evidence for the correct use of endovascular and hybrid methods for bleeding control and resuscitation. Clinicians and researchers in the field of trauma, surgery, anesthesia/intensivists, vascular surgery, interventional radiology, emergency medicine, orthopedics, and gynecology, as well as military personnel and pre-hospital medical teams, are encouraged to contribute their data to the development of EVTM.

Ethics Statement

(1) All the authors mentioned in the manuscript have agreed to authorship, read and approved the manuscript, and given consent for submission and subsequent publication of the manuscript.
(2) The authors declare that they have read and abided by the JEVTM statement of ethical standards including rules of informed consent and ethical committee approval as stated in the article.

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Conflicts of Interest

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