

CADTH Reference List

Emergency Vascular Surgery in the Hybrid Operating Room

March 2023

Authors: Weiyi Xie, Sharon Bailey

Cite As: *Emergency Vascular Surgery in the Hybrid Operating Room*. (CADTH reference list: summary of abstracts). Ottawa: CADTH; 2023 Mar.

Disclaimer: The information in this document is intended to help Canadian health care decision-makers, health care professionals, health systems leaders, and policy-makers make well-informed decisions and thereby improve the quality of health care services. While patients and others may access this document, the document is made available for informational purposes only and no representations or warranties are made with respect to its fitness for any particular purpose. The information in this document should not be used as a substitute for professional medical advice or as a substitute for the application of clinical judgment in respect of the care of a particular patient or other professional judgment in any decision-making process. The Canadian Agency for Drugs and Technologies in Health (CADTH) does not endorse any information, drugs, therapies, treatments, products, processes, or services.

While care has been taken to ensure that the information prepared by CADTH in this document is accurate, complete, and up to date as at the applicable date the material was first published by CADTH, CADTH does not make any guarantees to that effect. CADTH does not guarantee and is not responsible for the quality, currency, propriety, accuracy, or reasonableness of any statements, information, or conclusions contained in any third-party materials used in preparing this document. The views and opinions of third parties published in this document do not necessarily state or reflect those of CADTH.

CADTH is not responsible for any errors, omissions, injury, loss, or damage arising from or relating to the use (or misuse) of any information, statements, or conclusions contained in or implied by the contents of this document or any of the source materials.

This document may contain links to third-party websites. CADTH does not have control over the content of such sites. Use of third-party sites is governed by the third-party website owners' own terms and conditions set out for such sites. CADTH does not make any guarantee with respect to any information contained on such third-party sites and CADTH is not responsible for any injury, loss, or damage suffered as a result of using such third-party sites. CADTH has no responsibility for the collection, use, and disclosure of personal information by third-party sites.

Subject to the aforementioned limitations, the views expressed herein do not necessarily reflect the views of Health Canada, Canada's provincial or territorial governments, other CADTH funders, or any third-party supplier of information.

This document is prepared and intended for use in the context of the Canadian health care system. The use of this document outside of Canada is done so at the user's own risk.

This disclaimer and any questions or matters of any nature arising from or relating to the content or use (or misuse) of this document will be governed by and interpreted in accordance with the laws of the Province of Ontario and the laws of Canada applicable therein, and all proceedings shall be subject to the exclusive jurisdiction of the courts of the Province of Ontario, Canada.

The copyright and other intellectual property rights in this document are owned by CADTH and its licensors. These rights are protected by the Canadian *Copyright Act* and other national and international laws and agreements. Users are permitted to make copies of this document for non-commercial purposes only, provided it is not modified when reproduced and appropriate credit is given to CADTH and its licensors.

About CADTH: CADTH is an independent, not-for-profit organization responsible for providing Canada's health care decision-makers with objective evidence to help make informed decisions about the optimal use of drugs, medical devices, diagnostics, and procedures in our health care system.

Funding: CADTH receives funding from Canada's federal, provincial, and territorial governments, with the exception of Quebec.

Questions or requests for information about this report can be directed to requests@cadth.ca

Key Messages

- We did not find any studies on the clinical effectiveness of emergency vascular surgery conducted in a hybrid operating room.
- We identified other references on this topic that may be of interest, which are listed in the Appendix.

Research Question

What is the clinical effectiveness of emergency vascular surgery conducted in a hybrid operating room?

Methods

Literature Search Methods

An information specialist conducted a literature search on key resources including MEDLINE, the Cochrane Database of Systematic Reviews, the International HTA Database, the websites of Canadian and major international health technology agencies, as well as a focused internet search. The search approach was customized to retrieve a limited set of results, balancing comprehensiveness with relevancy. The search strategy comprised both controlled vocabulary, such as the National Library of Medicine's MeSH (Medical Subject Headings), and keywords. Search concepts were developed based on the elements of the research questions and selection criteria. The main search concepts were vascular surgeries and hybrid operating rooms. The search was completed on March 8, 2023, and limited to English-language documents published since January 1, 2018. Internet links were provided, where available.

Selection Criteria and Summary Methods

One reviewer screened literature search results (titles and abstracts) and selected publications according to the inclusion criteria presented in [Table 1](#). Full texts of study publications were not reviewed. The Overall Summary of Findings was based on information available in the abstracts of selected publications.

Table 1: Selection Criteria

Criteria	Description
Population	Patients undergoing emergency vascular surgery
Intervention	Surgery performed in a hybrid operating room
Comparator	Surgery performed in a standard operating room
Outcomes	Clinical benefits (e.g., postoperative functional status, length of hospital stay, health-related quality of life, patient satisfaction, operative time) and harms (e.g., rates of adverse events, hospital readmission, surgical revisions, complications [e.g., infections])

Criteria	Description
Study designs	Health technology assessments, systematic reviews, randomized controlled trials, non-randomized studies

Results

No relevant health technology assessments, systematic reviews, randomized controlled trials, or non-randomized studies were identified regarding the clinical effectiveness of emergency vascular surgery conducted in a hybrid operating room.

References of potential interest that did not meet the inclusion criteria are provided in [Appendix 1](#).

Overall Summary of Findings

No relevant literature was found regarding the clinical effectiveness of emergency vascular surgery conducted in a hybrid operating room; therefore, no summary can be provided.

References

Health Technology Assessments

No literature identified.

Systematic Reviews

No literature identified.

Randomized Controlled Trials

No literature identified.

Non-Randomized Studies

No literature identified.

Appendix 1: References of Potential Interest

Additional References

Case Reports

Bramucci A, Miceli F, Fontana A, Tusini N, Sereni G, Sassatelli R. Successful endovascular and endoscopic treatment of a symptomatic celiac artery aneurysm for obstructive jaundice: A clinical case report. *Ann Vasc Surg.* 2022;80:395.e1-395.e7. [PubMed](#)

Kim B, Wang K, Kiat A, Punch GJ, Leslie AS. Case report: Endovascular embolization of the thoracoacromial branch of axillary artery after gunshot trauma at a regional trauma center. *Int J Surg Case Rep.* 2022;94:107041. [PubMed](#)

Shirai S, Ueda T, Sugihara F, et al. Transileocolic endovascular treatment by a hybrid approach for severe acute portal vein thrombosis with bowel necrosis: Two case reports. *World J Clin Cases.* 2022;10(6):1876-1882. [PubMed](#)

Murai Y, Matsumoto S, Egawa T, Funabiki T, Shimogawara T. Hybrid emergency room management of a ruptured abdominal aortic aneurysm. *J Vasc Surg Cases Innov Tech.* 2020;7(1):21-25. [PubMed](#)