CADTH RAPID RESPONSE REPORT: SUMMARY OF ABSTRACTS

Vasopressors for Cardiogenic Shock: Guidelines

Service Line: Rapid Response Service
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Funding: CADTH receives funding from Canada’s federal, provincial, and territorial governments, with the exception of Quebec.
Research Questions
1. What are the evidence-based guidelines regarding the use of vasopressors for the prevention of cardiogenic shock in patients with myocardial infarction in a pre-hospital or emergency department setting?
2. What are the evidence-based guidelines regarding the use of vasopressors for the treatment of cardiogenic shock in patients with myocardial infarction in a pre-hospital or emergency department setting?

Key Findings
Five evidence-based guidelines were identified regarding the use of vasopressors for the treatment of cardiogenic shock in patients with myocardial infarction in a pre-hospital or emergency department setting.

Methods
A limited literature search was conducted on key resources including PubMed, The Cochrane Library, University of York Centre for Reviews and Dissemination (CRD) databases, Canadian and major international health technology agencies, as well as a focused Internet search. No filters were applied to limit retrieval by study type. Where possible, retrieval was limited to the human population. The search was also limited to English language documents published between January 1, 2012 and January 17, 2017.

Selection Criteria
One reviewer screened citations and selected studies based on the inclusion criteria presented in Table 1.

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<th>Table 1: Selection Criteria</th>
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<tr>
<td><strong>Population</strong></td>
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<td><strong>Outcomes</strong></td>
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<td><strong>Study Designs</strong></td>
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Results

Rapid Response reports are organized so that the higher quality evidence is presented first. Therefore, health technology assessment reports, systematic reviews, and meta-analyses are presented first. These are followed by evidence-based guidelines.

Five evidence-based guidelines were identified regarding the use of vasopressors for the treatment of cardiogenic shock in patients with myocardial infarction. No relevant health technology assessments, systematic reviews, or meta-analyses were identified.

Additional references of potential interest are provided in the appendix.

Overall Summary of Findings

Five evidence-based guidelines were identified regarding the use of vasopressors for the treatment of cardiogenic shock in patients with myocardial infarction. Two guidelines\(^2\)\(^3\) specify emergency department or pre-hospital settings, but the settings in the remaining guidelines\(^1\)\(^4\)\(^5\) are unclear.

All five guidelines\(^1\)\(^5\) recommend the use of norepinephrine for the treatment of patients with cardiogenic shock resulting from myocardial infarction. None of the guidelines specify the use of vasopressors for the prevention of cardiogenic shock in patients with myocardial infarction.

References Summarized

Health Technology Assessments

No literature was identified.

Systematic Reviews and Meta-analyses

No literature was identified.

Guidelines and Recommendations


4. Task Force on the management of ST-segment elevation acute myocardial infarction of the European Society of Cardiology (ESC), Steg PG, James SK, Atar D, Badano LP, Blomstrom-Lundqvist C, et al. ESC Guidelines for the management of acute myocardial

5. See section: “Treatment of Cardiogenic Shock (Killip Class IV)”, p.2602
Notes: Summary available from the National Guideline Clearinghouse. https://www.guideline.gov/summaries/summary/39353

Appendix — Further Information

Guidelines and Recommendations – Uncertain Methodology

Review Articles

Additional References