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CADTH RAPID RESPONSE REPORT: REFERENCE LIST

Blood Administration Sets for Patients Receiving Blood Products: Clinical Effectiveness and Guidelines

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Research Questions

1. What is the comparative safety of straight-type blood administration sets versus Y-type blood administration sets for patients receiving blood products or blood components?

2. What are the evidence-based guidelines regarding the selection of blood administration sets for patients receiving blood products or blood components?

Key Findings

No relevant literature was identified regarding the safety of straight-type or Y-type blood administration sets or the selection of blood administration sets for patients receiving blood products of blood components. In addition, no evidence-based guidelines were identified.

Methods

A limited literature search was conducted by an information specialist on key resources including PubMed, CINAHL, 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. The search strategy was comprised of both controlled vocabulary, such as the National Library of Medicine's MeSH (Medical Subject Headings), and keywords. The main search concepts were blood transfusions and tubing or instrumentation. No filters were applied to limit the 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, 2009 and May 29, 2019. Internet links were provided, where available.

Selection Criteria

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

Table 1: Selection Criteria

Population	Patients in any clinical setting who are receiving blood products
Intervention	Q1: Straight-type blood administration sets Q2: All types of blood administration sets
Comparator	Q1: Y-type blood administration sets Q2: No comparator
Outcomes	Q1: Safety (e.g., rates of adverse events, prevention of severe reactions) Q2: Evidence-base guidelines
Study Designs	Health technology assessments, systematics reviews, meta-analyses, randomized controlled trials, non-randomized studies, evidence-based guidelines

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 randomized controlled trials, non-randomized studies, and evidence-based guidelines.

No relevant health technology assessments, systematic reviews, meta-analyses, randomized controlled trials, non-randomized studies, or evidence-based guidelines were identified regarding the safety of straight-type or Y-type blood administration sets or the selection of blood administration sets for patients receiving blood products of blood components.

Health Technology Assessments

No literature identified.

Systematic Reviews and Meta-analyses

No literature identified.

Randomized Controlled Trials

No literature identified.

Non-Randomized Studies

No literature identified.

Guidelines and Recommendations

No literature identified.