TITLE: Chlorhexidine for the Cleansing of Contaminated Traumatic Wounds in the Emergency Department: Clinical Effectiveness and Guidelines

DATE: 10 September 2014

RESEARCH QUESTIONS

- 1. What is the clinical effectiveness of chlorhexidine for the cleansing of contaminated traumatic wounds in the emergency department?
- 2. What are the evidence-based guidelines regarding the use of antiseptic solutions for the cleansing of contaminated traumatic wounds in the emergency department?

KEY FINDINGS

No relevant literature was identified regarding the clinical effectiveness of chlorhexidine for the cleansing of contaminated traumatic wounds in the emergency department. In addition, no evidence-based guidelines were identified regarding the use of antiseptic solutions for the cleansing of contaminated traumatic wounds in the emergency department.

METHODS

A limited literature search was conducted on key resources including PubMed, The Cochrane Library (2014, Issue 9), 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 used to limit retrieval by publication type for question 1. A methodological filter was applied to limit retrieval to guidelines for question 2. Where possible, retrieval was limited to the human population. The search was also limited to English language documents published between January 1, 2009 and September 2, 2014. Internet links were provided, where available.

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SELECTION CRITERIA

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

Table 1: Selection Criteria	
Population	Any patient presenting to the emergency department with contaminated traumatic wounds
Intervention	Chlorhexidine
Comparator	Q1 – Povidone iodine
	Q2 – Any antiseptic solution
Outcomes	Infection prevention, adverse events/harms (possibly toxicity), best practice,
	evidence-based guidelines
Study Designs	Health technology assessment reports, systematic reviews, meta-analyses,
	randomized controlled trials, non-randomized studies, evidence-based
	guidelines

RESULTS

No relevant literature was identified regarding the clinical effectiveness of chlorhexidine for the cleansing of contaminated traumatic wounds in the emergency department. In addition, no evidence-based guidelines were identified regarding the use of antiseptic solutions for the cleansing of contaminated traumatic wounds in the emergency department.

References of potential interest are provided in the appendix.

OVERALL SUMMARY OF FINDINGS

No relevant literature was identified regarding the clinical effectiveness of chlorhexidine for the cleansing of contaminated traumatic wounds in the emergency department. In addition, no evidence-based guidelines were identified regarding the use of antiseptic solutions for the cleansing of contaminated traumatic wounds in the emergency department. Therefore, no summary can be provided.

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REFERENCES SUMMARIZED

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.

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Clinical Practice Recommendations - Unclear Methodology

 Sagerman PJ, McBride AS, Halvorson EE. Management of wounds in the pediatric emergency department. Pediatric Emergency Medicine Practice [Internet]. 2010 Sep [cited 2014 Sep 10];7(9). Available from: https://www.ebmedicine.net/media_library/aboutUs/Peds0910%20Wounds%20practice%2 Orecs.pdf

Review Articles

- 2. Darton A. Burns unit: preparation for transfer. Adelaide (AU): The Joanna Briggs Institute; 2013 Jul 1.
- 3. Eardley WG, Watts SA, Clasper JC. Limb wounding and antisepsis: iodine and chlorhexidine in the early management of extremity injury. Int J Low Extrem Wounds. 2012 Sep;11(3):213-23. PubMed: PM22729552
- Nicks BA, Ayello EA, Woo K, Nitzki-George D, Sibbald RG. Acute wound management: revisiting the approach to assessment, irrigation, and closure considerations. Int J Emerg Med [Internet]. 2010 [cited 2014 Sep 10];3(4):399-407. Available from: http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3047833
 PubMed: PM21373312