

Title	Preoperative skin antiseptic preparations and application techniques for preventing surgical site infections: a systematic review of the clinical evidence and guidelines
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Reference	CADTH Rapid Response Report June, 2011. ISSN: 1922-8147 (online). Available from: http://www.cadth.ca/media/pdf/htis/june-2011/M0025_Pre-Operative_Skin_Prep_Final.pdf

Aim

To evaluate the clinical effectiveness of preoperative skin antiseptic preparations and application techniques for preventing surgical site infections (SSIs) and to assess evidence-based guidelines on their use, to help standardize practice.

Conclusions and results

Twelve RCTs, nine observational studies, and one evidence-based guideline were eligible for inclusion in the review. The evidence suggests that preoperative antiseptic showers are effective for reducing skin flora but evidence for surgical site infections (SSIs) is inconclusive. When preparing the surgical site, it appears that the method used to apply the antiseptic (paint or scrub) is inconsequential. Results comparing active ingredients in different antiseptic products were also inconclusive due to the presence of other substances with antiseptic properties (alcohol) in some products. Only one practice guideline was available for this topic.

Methods

English language studies were identified by searching electronic databases and grey literature sources for material reported between January 2001 and June 2011, limited to health technology assessments, systematic reviews, meta-analyses, randomized and non-randomized controlled trials and clinical practice guidelines. Two reviewers independently selected and appraised eligible studies.

Further research/reviews required

Large, well-conducted RCTs with consistent protocols comparing agents with the same bases are needed to provide unequivocal evidence regarding the effectiveness of one antiseptic preparation over another for the prevention of surgical site infections (SSIs).

Written by

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