Effectiveness of Strategies for the Management and/or Prevention of Hypothermia within the Adult Peri-operative Environment

Clinical study

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TYPE OF STUDY
Retrospective, studies review

STUDY OBJECTIVE
The objective of this review was to identify the most effective methods for the treatment and/or prevention of hypothermia in intraoperative or postoperative patients.

METHODS
Nineteen studies with a combined 1,451 patients who underwent different surgical procedures were included in this review. Meta-analysis was not possible. Two independent reviewers assessed methodological validity of papers selected for retrieval and any disagreements were resolved through discussion.

STUDY RESULTS
Forced-air warming in pregnant women scheduled for caesarean delivery under regional anesthesia prevented maternal and fetal hypothermia. Extra warming with forced air compared to routine thermal care was effective in reducing the incidence of surgical wound infections and postoperative cardiac complications. Passive warming with reflective heating blankets or elastic bandages wrapped around the legs tightly were found to be ineffective in reducing the incidence or magnitude of hypothermia.

CONCLUSION
There are significant benefits associated with forced-air warming. Evidence supports commencement of active warming preoperatively and monitoring it throughout the intraoperative period. Single strategies such as forced-air warming were more effective than passive warming; however, combined strategies, including preoperative commencement, use of warmed fluids plus forced-air warming as other active strategies were more effective in vulnerable groups (age or durations of surgeries).

ABSTRACT AVAILABLE AT

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