

PREWARMING FOR PREVENTION OF PERIOPERATIVE HYPOTHERMIA IN PATIENTS WITH COMBINED EPIDURAL AND GENERAL ANESTHESIA: A RANDOMIZED CONTROLLED TRIAL

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Abstract

OBJECTIVE The aim of this study was to assess the influence of active warming after epidural anesthesia (EDA) and before general anesthesia in prevention of perioperative hypothermia. **METHOD** This randomized controlled trial was conducted in the department of anesthesiology in university medical center of Ho Chi Minh city, Vietnam from December 2019 until April 2020. This trial included 60 adult patients who were scheduled for major abdominal surgery with a duration of at least 120 minutes and under combined general anesthesia and EDA. Patients were excluded if age was below 18 years, American Society Anesthesiologists' physical status classification of IV or higher, or refusal of EDA. Written informed consent was obtained for all patients. Patients were divided randomly into two groups. The first group received 10 minutes of active air-forced warming after EDA before the induction of general anesthesia. The second group was covered with a blanket 10 minutes after EDA and before general anesthesia. Core temperatures were recorded throughout the study. The primary outcome measures were the incidence of perioperative hypothermia and the degree of hypothermia. The secondary outcome measures were rate and time for body temperature to return to normal and incidence of postoperative body shivering. **RESULTS** Without active warming ($n = 21$), 70% of patients became hypothermic ($<36^{\circ}\text{C}$) postoperatively. Active air-forced warming for 10 minutes after EDA and before induction of general anesthesia decreased the incidence of postoperative hypothermia to 26.7% ($n = 8$). **CONCLUSION** Active air-forced warming for 10 minutes after EDA and before induction of general anesthesia is efficient in reducing the incidence of perioperative hypothermia.

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