Comparison of a radiant patient warming device with forced air warming during laparoscopic cholecystectomy

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Résumé / Abstract
The importance of maintaining a patient's core body temperature during anaesthesia to reduce the incidence of postoperative complications has been well documented. The standard practice of this institution is the use of a forced air device for intraoperative warming. The purpose of this study was to compare this standard with an alternative warming device using a radiant heat source which only heated the face. This prospective, randomized controlled trial compared the efficacy of two methods of intraoperative warming: the BairHugger (Augustine Medical, U.S.A.) forced air device and the Sun Touch (Fisher & Paykel Healthcare, N.Z.) radiant warmer during laparoscopic cholecystectomy in 42 female patients. Oesophageal core temperatures were recorded automatically on to computer during operations using standardised anaesthesia, intravenous infusions and draping. The study failed to show any statistical or clinical difference between the two patient groups in terms of mean core temperature both intraoperatively (P=0.42) and in the recovery period (P=0.54). Mean start to end core temperature differences were marginly lower in the radiant group (0.08°C) but not statistically or clinically significantly different. Given some of the drawbacks with forced air systems, such as the expense of the single use blanket, this new radiant warming device offers an alternative method of active warming with advantages in terms of cost and possible application to a wide variety of surgical procedures.