ABSTRACT

Perioperative hypothermia, defined as a core body temperature lower than 36°C, is associated with increased perioperative complications and prolonged hospitalization. The aim of this thesis is to analyze measures that are taken to prevent perioperative hypothermia at the Orthopedic Clinic of one Czech hospital and compare them with the current recommendations of the American Society of PeriAnesthesia Nurses, Association of Operating Room Nurses and the National Institute for Health and Care Excellence. The study included 223 patients who underwent a planned orthopedic surgery and who were more than 18 years old. As a method of data collection I chose studying the medical documentation. The obtained data were processed quantitatively. The recommended body temperature range 36.5–37.5°C before leaving an operating room had total of 60.55% of cases. Neither one patient has been no action in terms of prevention of hypothermia.

Body temperature was taken in 22.4% of cases at the beginning of and during the surgery. Except for a cotton sheet, which was used in 100% of patients, no additional measures were taken in 18.4% of patients. Thermal insulation was used in 41.7% of patients, in-line warming system of infusion fluids in 65% of patients, forced air warming system in 17.9% of patients, and disposable blanket in 16.1% of patients. Combination of the in-line warming system of infusion fluids and forced air warming system was used in 14.8% of patients.

Body temperature was measured in 68.6% of patients after their arrival at the ICU. Forced air warming system was used in 51% of patients and an extra sheet was used in 20% of patients.

Prevention of hypothermia as is currently recommended was followed neither in the preoperative nor intraoperative nor postoperative phase.

Finally the thesis provides recommendations for the prevention of perioperative hypothermia.

**keywords:** prevention, perioperative, hypothermia, normothermia