Development of Perioperative Hypothermia Management protocol for gastric cancer surgical patients

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INTRODUCTION

The necessity of the study
The published incidence of perioperative hypothermia ranges from 50% to 90%
Surgical site infection
Morbid cardiac events
Surgical bleeding
Memories of dermal discomfort
Prolonged recovery times
Lengthened hospital stays
Increased health care costs
The need for guidelines that can actually be applied in domestic clinics.
The Necessity of Integrated management for the prevention of hypothermia

The Objectives
- Develop the perioperative hypothermia management protocol for the patient.
- Evaluate the effect of perioperative hypothermia management protocol on body temperature, thermal discomfort, memorial symptoms of hypothermia in gastric cancer surgical patients.

METHODS

The Design
This study was carried out by methodological research to develop the protocol and a quasi experimental study to evaluate its effect.

The Development Process
Stage 1: Development of perioperative hypothermia management protocol for surgical patients
Clinical questions
Literature Review
Guideline adaptation
Guideline development
Development of new protocol
Stage 2: Evaluation of the effectiveness of the PHM protocol
Be reviewed by IRB
Nonequivalent control group pretest-posttest design

RESULTS

Total of 80 patients were included in our study, with 40 patients in the control group and 40 patients in the PHM protocol application group. No significant differences were found in the demographic and surgical characteristics between the two groups. There was a statistically significant difference in body temperature of preoperative (F=13.747, p=.001), intraoperative (F=12.606, p=.001), postoperative (F=98.282, p=.001), and thermal discomfort of preoperative (F=71.197, p=.001), postoperative (F=76.534, p=.001), and physical (t=3.840, p=.001) & psychological (t=2.783, p=.001) memorial symptoms of hypothermia.

In other words, the body temperature of the experimental group was maintained in the normal range compared to the control group. Thermal discomfort and memorial symptoms of hypothermia were lower in the experimental group than in the control group.

CONCLUSION

We confirmed that the application of this protocol prevents perioperative hypothermia and improves comfort of gastric cancer surgical patients. The PHM protocol is considered as a useful clinical guideline that can be applied to clinical practice for management of perioperative hypothermia.