

CLINICAL SUMMARY

Perioperative Hypothermia in Orthopedic Surgeries

Intraoperative Hypothermia During Surgical Fixation of Hip Fractures

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CENTER AND COUNTRY

Henry Ford Health System, and Wayne State University School of Medicine (TRJ, JS), Detroit, Michigan

TYPE OF STUDY

Retrospective review

STUDY OBJECTIVE

The aim was to determine the incidence of perioperative hypothermia in patients undergoing surgery for hip fractures and to study its impact on complications and outcomes.

METHODS

Records of 1,541 patients who underwent operative fixation for hip fracture at a single institute between January 2005, and October 2013 were reviewed. Hypothermia was defined as mean body temperature below 36°C.

STUDY RESULTS

Intraoperative hypothermia was observed in 17% of the patients in this cohort and was correlated with increased rates of deep surgical-site infection (odds ratio, 3.30; 95% confidence interval, 1.19-9.14; $P = .022$). The risk of hypothermia was higher in patients with lower body mass index and increasing age ($P = .004$ and $P = .005$, respectively).

CONCLUSION

The incidence of intraoperative hypothermia in operatively treated hip fractures was 17.0% in this study. Mean intraoperative hypothermia was significantly associated with DSSI. Increasing age and lower BMI increased the risk for intraoperative hypothermia. To the authors' knowledge, this is the first and largest study that specifically analyzes the effect of intraoperative hypothermia in patients undergoing operative treatment of hip fractures.

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YEAR OF PUBLICATION

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Intraoperative Hypothermia in Total Hip Arthroplasty (THA) and Total Knee Arthroplasty (TKA)

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CENTER AND COUNTRY

Henry Ford Health System, and Wayne State University School of Medicine (TRJ, JS), Detroit, Michigan

TYPE OF STUDY

Retrospective

STUDY OBJECTIVE

This retrospective study aimed to investigate the incidence of perioperative hypothermia in patients undergoing TKA and THA, and to study its impact on complications and outcomes.

METHODS

Records of 2,397 patients who underwent TKA or THA at a single institute between January 1, 2011, and December 31, 2013 were reviewed. Hypothermia was defined as mean body temperature below 36°C.

STUDY RESULTS

Intraoperative hypothermia was seen in 37%, 43.9%, and 32.6% of arthroplasty, THA, and TKA patients, respectively. Hypothermia was associated with increased estimated blood loss, but no increase in associated transfusion was observed ($P = .006$).

CONCLUSION

Hypothermia was associated with increased estimated blood loss, but no increase in associated transfusion was observed.

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<https://www.healio.com/orthopedics/journals/ortho/2017-1-40-1/%7B63d1b09b-176a-410b-b510-b3ab593ce7a4%7D/intraoperative-hypothermia-in-total-hip-and-knee-arthroplasty>

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