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**EFFECTS OF INADVERTENT
PERIOPERATIVE HYPOTHERMIA ON THE
IMMUNE FUNCTIONS & OXYGEN
CONSUMPTION**

THESIS

Submitted for partial fulfillment of M.D. degree in
Anesthesia and Pain Relief

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xylo

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رقم مسلسل: (.....)

محضر اجتماع لجنة الحكم

على الرسالة المقدمة من الطبيب/
(١) توطئة لدخول إمتحان الدكتوراه في/
أو
(٢) كجزء من الجزء الثاني لإمتحان الماجستير في/

أجتمعت لجنة الحكم على الرسالة المذكورة من السادة/
الأستاذ الدكتور/
الأستاذ الدكتور/
الأستاذ الدكتور/

وذلك في يوم:
في جلسة علنية بمدرج

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ثم ناقشه السادة أعضاء لجنة الحكم في:
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وقد رت اللجنة:
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الأستاذ الدكتور
عبد الله شوقي

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الأستاذ الدكتور
محمد رافع

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محمد رافع

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ABSTRACT.

Inadvertent hypothermia is a frequent event during the perioperative period. While, decreases in body temperatures may exert organ protective effects under certain conditions, there is accumulating evidence that inadvertent perioperative hypothermia may also adversely affect organ function and outcome.

The aim of our current study was to find out the possible effects of mild inadvertent perioperative hypothermia on the immune system and total body O₂ consumption, in comparison with intended normothermia in patients anesthetized with the two commonly used inhalational anesthetics, halothane and isoflurane.

It was found that inadvertent perioperative hypothermia adversely affects immune functions through suppression of IL-2 production postoperatively, and it causes a significant immediate postoperative increase in total body O₂ consumption, an event that may especially compromise patients with cardiopulmonary disease.

It was concluded that by preventing inadvertent perioperative hypothermia and maintaining normothermia we can prevent such complications.

KEY WORDS.

-Inadvertent- Perioperative-Hypothermia. Normothermia.

-Immune functions - Cytokines - Interleukin-2 - Interleukin-6- Tumor Necrosis Factor- α - Phagocytic activity.

-Total body O₂ consumption.

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