AORN RESPONDS TO RECENT CRITICISMS OF GUIDELINE FOR SURGICAL ATTIRE

Sent to the Editor on November 18, 2018

Editor In Chief

Timothy J. Eberlein

Re: Operating Room Attire Policy and Healthcare Cost: Favoring Evidence over Action for Prevention of Surgical Site Infections

Adham Elmously, MD, Katherine D Gray, MD, Fabrizio Michelassi, MD, FACS, Cheguevara Afaneh, MD, FACS, Michael D Kluger, MD, FACS, Arash Salemi, MD, FACS, Anthony C Watkins, MD, Alfons Pomp, MD, FACS. Article in press.

To the Editor:

The Association of periOperative Registered Nurses (AORN) would like to thank Elmously et al¹ for the recent research they conducted that was published in the *Journal of the American College of Surgeons*. The results of this study add to the body of evidence related to the effectiveness of surgical attire worn during operative and other invasive procedures as one of the mechanisms that may assist in preventing surgical site infections (SSIs). Further research in this area is definitely warranted.

Regrettably, the authors have misrepresented the AORN recommendation throughout the article.

The authors state, "The guidelines ban the traditional surgeon skull cap, mandate the use of a bouffant cap..." (1,pg 1) This is unequivocally incorrect. The guideline does not mention skull caps nor is there any mention of bouffant caps; AORN has neither urged the elimination of traditional surgical caps nor mandated the use of bouffant caps. AORN does not specify the type or style of head covering that should be worn. Recommendation III of the guideline states, "A clean surgical head cover or hood that confines all hair and completely covers the ears, scalp skin, sideburns, and nape of the neck should be worn." Additionally it is standard practice that if the AORN guidelines are going to be discussed then the guideline itself should be cited and not secondary references. 2

The authors further state that ..."the main criticism (of the guideline) being that, although well intentioned, there is little evidence to support them, and they were promulgated without collaboration with the surgical community especially in light of multiple studies showing no relationship between headgear and SSIs^{1,pg1}." Again this is incorrect.

The AORN guidelines are based on a comprehensive, systematic review of research and non-research evidence; the individual references are appraised and scored, and the recommendations are rated according to the strength and quality of the evidence supporting each recommendation. The guidelines are authored by AORN perioperative practice specialists and in collaboration with

liaisons representing the American Association of Nurse Anesthetists, the American College of Surgeons, the American Society of Anesthesiologists, the Association for Professionals in Infection Control and Epidemiology, the International Association of Healthcare Central Service Materiel Management, and the Society for Healthcare Epidemiology of America.

The recommendations in the Guideline for Surgical Attire include a benefits balanced with harms assessment to determine the risk/benefit of recommendations to patients. The recommendations are not based on a proven causal effect of a relationship between headgear and SSIs but a benefit to patients because hair and skin can harbor bacteria that can be dispersed into the environment and the purpose of covering them is to reduce the patient's exposure to potentially pathogenic microorganisms from the perioperative team member's head, hair, ears, and facial hair.

Additionally in Table I the authors state that AORN recommends "Arms should be covered with long-sleeved jackets in semi-restricted areas" and that "Non-disposable head coverings should be covered with a disposable head cover." Neither is recommended by AORN.

For arm covering the guideline states that the arms should be covered during two activities only, in Recommendation I.c.1." The perioperative team member should wear scrub attire that covers the arms while performing preoperative patient skin antisepsis."^{2,pg} ¹¹¹ And in Recommendation I.c.2. "The perioperative or sterile processing team member should wear scrub attire that covers the arms while preparing and packaging items in the clean assembly section of the sterile processing area."^{2,pg} ¹¹¹ AORN has never stated in the surgical attire guideline that non-disposable head covering should be covered with a disposable head cover.

The foremost concern for all perioperative professionals should be for patient safety and for providing the cleanest surgical environment possible for all patients undergoing operative and other invasive procedures. Within a bundled approach for reducing risk of SSIs, covering and containing hair is a reasonable and prudent measure. There is no harm in doing so, but the benefit to all patients is a reduced risk of exposure to potentially pathogenic organisms that live on the hair, skin, and facial hair of perioperative team members.

AORN guidelines are posted for public comment for a 30 day period on AORNs website for all perioperative team members and members of the public to read and provide comments. Each comment is reviewed and the guidelines revised based on relevant comments provided. Each guideline is reviewed on a 5 year basis and sooner if new research becomes available. The guideline for surgical attire is under revision and will be up for public comment beginning January 2, 2019 and will be available for 60 days, AORN encourages all perioperative team members to access the guideline at aorn.org and provide comments.

References

1. Operating Room Attire Policy and Healthcare Cost: Favoring Evidence over Action for Prevention of Surgical Site Infections. Adham Elmously, MD, Katherine D Gray, MD, Fabrizio Michelassi, MD, FACS, Cheguevara Afaneh, MD, FACS, Michael D Kluger, MD, FACS, Arash Salemi, MD, FACS, Anthony C Watkins, MD, Alfons Pomp, MD, FACS. (2018) Article in press. *Journal of the American College of Surgeons*.

2. Guideline for surgical attire. In: *Guidelines for Perioperative Practice*. Denver, CO: AORN, Inc; 2017:105-127.

Sincerely,

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