Minimizing Hair Dispersal: Is This an Opportunity for Improvement in HAI Prevention?

Hugo Xi, MD, MBA; Lena Pearson, MS; Trinh M. Peri, MD, MSc

*CareFusion, Vernon Hills, IL; Department of Medicine, Johns Hopkins University School of Medicine, Baltimore, MD

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Objectives
1. To assess the current practice of hair removal in the operating room (OR) and the barriers to complete cleanup of clipped loose hair.
2. To determine the potential for improvement in surgical quality and healthcare associated infection (HAI) prevention by minimizing hair dispersal.

Methods
An online national survey of 2,500 randomly selected members from the 40,000 AORN member database was conducted in April 2015. We obtained information from the first 250 respondents who had at least 2 years of OR experience and with at least 2 procedures requiring SSH removal in the 10 days prior to the survey. Data from 250 respondents from 44 states were collected from the survey. Of the 250 respondents, 78% had more than 10 years' experience in the OR, 51% had a bachelor's degree or above, 56% were surgeons, and 44% were OR nurses.

Results
A total of 37% of respondents reported that 3–5 patients per week had SSH removed, and greater than 40% of patients needed SSH removal according to 52% of respondents. The compliance rate for clipping instead of razorizing in 56% of respondents (Figure 1). The compliance rate for use of a single-use clipper was 96%. However, 60% of SSH removals were done inside the OR (Figure 1).

The top three reasons for clipping inside the OR were surgeon preference (67%), patient safety (57%), and insufficient clipping during surgery (43%) (Figure 2). When SSH was removed inside the OR, 88.4% (n=221) of the respondents reported using sticky tape, and 26.4% (n=66) of respondents used a sticky glove to clean up the hair particles. Wet gauze (4.0%, n=10) and vacuum suction/device (1.6%, n=4) were also used.

Responses from the survey indicate that the majority of responding healthcare providers are adhering to the recommendations to not remove hair and if hair has to be removed, use a single-use clipper outside the OR. Based on this survey of current practices in the US, there is a need to educate healthcare providers on the risks associated with removing hair inside the OR and on the current recommendations on how to minimize hair dispersal in the OR.

Discussion and Conclusions
Responses from the survey indicate that the majority of responding healthcare providers are adhering to the recommendations to not remove hair and if hair has to be removed, use a single-use clipper outside the OR. Healthcare providers are largely not adhering to the recommendation to remove hair outside of the OR. SSH removal compliance rates across US hospitals vary depending on several components. The complete cleanup of the clipped loose hair may be critical to improve surgical quality and HAI prevention by minimizing dispersal with better cleanup of clipped loose hair and removing SSH outside the OR. Based on this survey of current practices in the US, there is a need to educate healthcare providers on the risks associated with removing hair inside the OR and on the current recommendations on how to minimize hair dispersal in the OR.

REFERENCES AND ACKNOWLEDGMENTS


5. CareFusion, a BD company. 75 Fairway Drive, Vernon Hills, IL 60061; CareFusion, a BD Company. JAMA Surg. 2014;150(7):605-627.

6. CareFusion, a BD company. 75 Fairway Drive, Vernon Hills, IL 60061; CareFusion, a BD Company. JAMA Surg. 2014;150(7):605-627.

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DISCUSSION AND CONCLUSIONS

Responders to the survey indicate that the majority of responding healthcare providers are adhering to the recommendations to not remove hair and if hair has to be removed, use a single-use clipper outside the OR. However, healthcare providers are largely not adhering to the recommendation to remove hair outside of the OR. SSH removal compliance rates across US hospitals vary depending on several components and may be critical to improving surgical quality and HAI prevention by minimizing dispersal with better cleanup of clipped loose hair and/or removing SSH outside the OR. Based on this survey of current practices in the US, there is a need to educate healthcare providers on the risks associated with removing hair inside the OR and on the current recommendations on how to minimize hair dispersal in the OR.