

SUMMARY OF:

CONCENTRATION OF BACTERIA PASSING THROUGH PUNCTURE HOLES IN SURGICAL GLOVES

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BACKGROUND

It has been shown that both glove perforation and bacterial counts on surgeons' hands increase with the duration of a procedure. The purpose of this study is to determine the amount of bacteria that can pass from patients to the surgical staff through glove perforations under real surgical conditions.

OVERVIEW

The surface of inner gloves, in which the outer glove had been perforated, was examined for microorganisms which were attributed to originating from the patient. Over a 4-month period, 20 surgeries were observed and gloves from each were examined for perforations and tested for organisms. Surgical sites were also examined.

RESULTS

Bacterial transmission through glove punctures occurred in 4.7% of the outer gloves examined. Of the 250 gloves evaluated, perforations were found in 21.1% of outer gloves and 14.8% of inner gloves, and 82.2% of all perforations were undetected by the surgical staff.

CONCLUSION

Direct bacterial transmission from the patient to the surgical staff can occur through glove perforations. Bacteria found to pass through the glove perforations included *staphylococci*, *micrococci* and *enterococci*.

References 1. Harnoß et al., Concentration of bacteria passing through puncture holes in surgical gloves *Am J Infect Control* 2010;38:154-8

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*Dr. Assadian has performed paid consulting work for Quantum Management & Service, a paid service provider of Ansell and/or its affiliates.