

SUMMARY OF:

INTRAOPERATIVE GLOVE PERFORATION – SINGLE VERSUS DOUBLE GLOVING IN PROTECTION AGAINST SKIN CONTAMINATION

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BACKGROUND

Glove perforations can lead to exposure of the surgical team to the patient's blood and bodily fluids, increasing their risk of infection. This study is to determine the glove perforation rate and whether or not double gloving decreases contamination compared to single gloving.

OVERVIEW

At random, single or double gloving was assigned on 66 procedures. A total of 396 gloves from the operating surgeon and first assistant were tested for perforations. Forty unused pairs of gloves were also tested as controls. Hands were examined for the presence of blood or bodily fluid.

RESULTS

Skin contamination occurred in 22.7% of cases in which double gloving resulted in perforation and in 42.1% of cases in which single gloves were perforated. In those cases where double gloves were worn, 32 perforations were found (22 in the outer glove and 10 in the inner glove). Out of the 22 outer glove perforations, only 4 had matching inner glove perforations, leading to the conclusion that in 82% of outer glove perforations, the inner glove will prevent contamination. 83.3% of the total perforations were undetected by the surgical team.

CONCLUSION

Double gloving provides more protection to healthcare workers than single gloving, in terms of visible skin contamination. It was also shown that double gloving was accepted by most surgeons after repeated use of the technique.

References 1. Thomas et al., Intraoperative glove perforation – single versus double gloving in protection against skin contamination *Postgrad Med J* 2001;77:458-460; <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1760980/pdf/v077p00458.pdf>

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