

**11% PERFORATIONS IN STERILE GLOVES; AN INDICATION TO WEAR A DOUBLE PAIR?**

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**Aim:** To evaluate the number of sterile glove perforations made in surgery

**Methods:** In a period of 3 weeks 216 sterile gloves collected from 26 different surgeries. They were filled with water in order to test them on perforations. A difference was made between 'long' (>2 hours) and 'short' (<2 hours) surgeries.

**Results:** In the 216 gloves collected 19 perforations (8.8%) were found in total. Two perforations had been noticed during the surgery. Most perforations were found in the gloves of the surgeon (n=10) and the resident assisting (n=7). Only 1 perforation was found in the glove of the scrubnurse.

In 12 'short' surgeries 5 of the 83 gloves (6%) were perforated. No gloves were changed during surgery. In 14 'long' surgeries 14 of the 133 gloves (11%) had perforations, despite the fact that gloves were changed during 8 surgeries. Most perforations were seen on the palmar side of the non-dominant hand.

**Conclusion / discussion:** Sterile gloves are used during surgery to reduce spread of pathogens, in order to make surgery safer for the patient as well as the surgeon. In Europe it is standard to wear a single pair of gloves. In 6% of the short surgeries and 11% of the long surgeries perforations were found after the surgery. Only 10% of the perforations had been noticed during the surgery. Literature shows that wearing a double pair of sterile gloves reduces the number of perforation from 9% to 2%. However, there is no direct evidence that shows a relation between glove perforations and pathogen transmission. Nevertheless, wearing double gloves can be considered to reduce the risk to transmission of pathogens.