

IS MOIST GAUZE USED TO WIPE OFF INSTRUMENTS DURING SURGERY A POTENTIAL HAZARD TO PATIENT SAFETY?

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Perioperative nurses have an overall responsibility to maintain a sterile environment through identifying and eliminating potential threats that can lead to contamination of the surgical field. Intraoperatively the perioperative nurse uses one or more moist surgical gauze(s) to wipe off blood and organic materials from surgical instruments. The perioperative nurse decides how long each surgical gauze stays in the operating field. Time of use and degree of contamination therefore varies. The purpose of this study was to evaluate if the surgical gauzes were contaminated with bacteria during surgery.

Samples were taken from the surgical gauzes during 22 gastrointestinal, vascular and endocrine surgeries. A total of 49 samples from surgical gauzes were collected and all samples were cultivated on standard media aerobically and anaerobically. The number of colonies was counted. Potentially pathogenic bacteria were identified by MALDI-TOF technique.

Bacteria was found in 16 of 22 surgeries (73 %). The number of surgical gauzes used to wipe off instruments, varied from one to six in each surgery. Bacterial growth was found in 62 % of the surgical gauzes and CFU varied between 1-120. Open surgeries showed significantly more CFU than laparoscopic surgeries.

The study showed bacterial growth on the surgical gauzes that were used to wipe off instruments intraoperatively. Most identified bacteria were potentially pathogenic. Reuse of moist gauze during surgery is a potential hazard to patient safety.

Key words: Bacterial contamination, Surgical site infections, Gauzes used during surgery.

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Short biography and picture of the presenter: Helene Steinsland Sørheim and Nathalie Åsebø are surgical nurses with master's degrees from Western Norway University of Applied Sciences. They finished their degrees in December 2021, but started working as surgical nurses in January 2020. Sørheim is currently working as a surgical nurse in obstetrics and gynaecology, while Åsebø is working as a surgical nurse in the thoracic department.

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