

Appendix A

Surgical Hand Asepsis

The goal of surgical hand asepsis is to remove the number of transient flora and reduce resident flora. It shall be done prior to participating in a surgical procedure.⁽¹⁾ Even after skin asepsis skin is not considered sterile, rather it is deemed surgically clean.

Surgical hand asepsis is the process of removing microorganisms from the hands and forearms using either mechanical washing with a surgical scrub agent (surgical hand scrub) or chemical antiseptics with an alcohol based hand rub (surgical hand rub).⁽¹⁾ Due to the superior antimicrobial activity ABHR (surgical hand rub) is the preferred method of preoperative surgical hand preparation.⁽²⁾ Many formulations also contain long acting compounds such as chlorhexidine gluconate.⁽²⁾

Surgical hand asepsis is only effective if the hands are free from hand and arm jewelry as well as watches so the product can reach all surfaces of the hands and forearms.

Surgical hand asepsis procedure (using either a scrub or rub) should follow a standardized protocol established and approved by the healthcare organization and follow the manufacturer's instructions for use.⁽³⁾

Any product used for surgical hand asepsis should:⁽²⁾

- Inhibit the growth of microorganisms under gloved hands
- Have as wide a spectrum for antimicrobial activity as possible
- Have a prolonged antiseptic effect
- Have a persistent antimicrobial activity due to rapid multiplication of bacteria under surgical gloves and the chance of glove punctures during surgery.

References:

1. [Surgical Aseptic Technique and Sterile Field](#). (June 30, 2023). Alberta Health Services (AHS). Accessed August 24, 2023.
2. [Best Practices for Hand Hygiene in All Health Care Settings, 4th ed.](#) (April 2014). Public Health Ontario (PHO). (PIDAC). Accessed August 24, 2023
3. The ORNAC Standards, Guidelines, and Position Statements for Perioperative Registered Nurses. 15th edition. (April 2021). Operating Room Nurses Association of Canada (ORNAC). Accessed August 24th, 2023.