

SURGICAL SCRUBBING, GOWNING AND GLOVING

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Surgical Scrubbing, Gowning and Gloving
Section F
Clinical Guidelines
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SURGICAL SCRUBBING, GOWNING AND GLOVING.

Key Words: Surgical scrubbing, surgical gowning, gloving, perioperative services, surgical preparation, preparation for surgery.

AIM

To minimise the risk of infection from microorganisms present at the time of interventional procedures and surgery.

BACKGROUND

The patient's surgical outcome is influenced by the creation and maintenance of an aseptic environment.

The surgical scrub is the process of removing debris and transient microorganisms from the hands and forearms, reducing the residual microbial count and leaving an antimicrobial residue on the skin to prevent growth of microorganisms for several hours.

The wearing of sterile gowns and gloves by the surgical scrub team minimises the risk of surgical wound infection in the patient, and protects the team from exposure to contamination from blood and other body fluids.

KEY POINTS

1. All members of the surgical scrub team shall be appropriately dressed in perioperative attire and personal protective equipment prior to commencing the surgical scrub.
2. Skin disinfectants and or antiseptics used for the surgical scrub shall be approved by the Therapeutic Goods Administration and used in accordance with the manufacturer's recommendations.
3. The surgical scrub team shall follow a standardised procedure for the surgical scrub.
4. The surgical gown shall be presented in a manner that enables its application using an aseptic technique.
5. Surgical gloves shall be applied in an aseptic manner.
6. Double gloving is recommended.
7. A three minute scrub shall be undertaken as the first scrub of the day.
8. Subsequent scrubs of 2 minutes shall be undertaken between cases.

PREPARATION:

Surgical Scrub Team Members

- Theatre suite attire shall be worn
- Bare below elbows at all times

- Clean closed in shoes, trainers, rubber boots or clogs shall be worn in theatre
- Hair completely covered with disposable hat provided or clean cloth hat
- Facial hair must be covered with a mask and disposable hood worn
- Headdresses worn for religious reason must be clean and for the purpose of wearing in theatre
- Remove all jewellery from the hands and arms (e.g. rings with stones, watches and bracelets)
- If unable to remove wedding ring, please pay particular attention to scrubbing under the ring
- Appropriate mask to be worn with protective eyewear
- Protective eyewear must be worn in theatre
- Ensure sleeves are above elbows
- Nails shall be short, clean and free of artificial acrylic nails and nail polish
- Ensure sterile gown pack and gloves are opened ready for use
- Disposable AAMI ¾ gown must be used for surgery.

Note: for insertion of spinal/ epidural anaesthetist will use AAMI 2 gowns.

FIRST SCRUB OF THE DAY:

3 minutes duration

Method:

- Open brush
- Turn tap on and adjust temperature
- Wet hands and arms under running water
- Turn off tap
- Apply anti microbial solution 5ml (1 pump) to hands and arms up to 2.5cm past the elbow for 30 seconds
- Remove pick from brush packet and clean nails for 15 seconds in all
- Discard pick and use brush on nails only for 15 seconds each hand, on completion the brush should be discarded
- Scrub all sides of each digit, including connecting web spaces, the back of the hands and palms for 1 minute
- Rinse off solution from fingertips to elbow
- Apply anti microbial solution to hands and halfway down forearms
- Wash hands paying particular attention to washing between the digits, the back of the hands and palms for 1 minute
- Finish off applying a circular movement from wrist to halfway down forearms
- Final rinse and turn tap off with elbow
- Allow excess water to drain from the elbows into the sink
- Walk to gowning and gloving area with hands held away from the body keeping hands higher than elbows.

Note: rinse from finger tips down to elbows one way only. Always keep hands higher than elbows.

SUBSEQUENT SCRUBS:

- Duration of 2 minutes
- Rinse hands and arms under running water
- Apply anti- microbial solution to hands and halfway down forearms for 30 seconds
- Attention must be paid to washing between the digits, the back of the hands and palms for 90 seconds
- Finish off applying a circular movement from wrist to halfway down forearms
- Final rinse turn tap off with elbow.

TO DRY HANDS AND ARMS:

- In the disposable gown pack there will be 2 paper towels, 1 for each hand and arm
- Step back from the trolley and open towel out fully, dry one hand with 1 half, fold over and continue down from the wrist to elbow in a patting circular motion, do not rub up and down the arm
- The discard towel in the appropriate waste bin
- Repeat drying method on the other hand
- Care must be taken when drying hands that the towel does not come into contact with the theatre suite attire
- Hands and arms must be dry before attempting to don gown and gloves.

GOWNING AND GLOVING:

- Disposable gowns only are used for surgery
- The closed glove method of gloving shall be used to don gloves
- Double gloving is recommended practice, the gloves underneath should be ½ size larger than the gloves on top, the top gloves will be the normal size for the wearer
- Should a change of gloves be required during surgery and the user has donned only 1 pair of gloves, the open method should be used to don gloves, the sleeves of the gown must remain at the wrist, not pulled down over the hand.

Note: medical staff must gown, glove and wear PPE when uterine manipulation is required.

GLOVING:

- 1) Closed Glove Technique 2) Open Glove Technique

CLOSED GLOVE TECHNIQUE

This is the recommended technique for those involved in a surgical procedure.

- Grip the sterile inside pack through your gown cuffs keeping the fingers inside the gown cuff, open and display the gloves upside down
- Place your right thumb inside the top cuff edge of the right glove (thumb to thumb), pick up and lay flat on your right hand.
- Place left thumb under the cuff exposed on right glove, and stretch glove over right hand
- Keeping your right fingers straight, pull down the glove with your left hand, using a combination of glove and sleeve pulling
- Ensure the white cuff remains inside the glove
- Repeat procedure with left glove.

Once gowned and gloved, areas considered most sterile are between the nipple line and umbilicus, the fingertips to the elbow.¹

Disposable gowns have a left side tie and a right side tie, both attached to a sterile card. The left tie is released from the card which is held by the scrub person, and the card with right tie attached is handed out to the scout. The scout will hold on to one side of the card while the scrub person pivots round and their back is covered. The scrubbed person releases the tie from the card and ties both ties at the side. The card is disposed of by the scout. The ties are tied at the front.

OPEN GLOVE TECHNIQUE:

This technique should be used if contamination has occurred at the table. This technique can be used if a catheterisation is performed on table by the circulating nurse.

- Pick up the cuff of the right glove with your left hand. Slide your right hand into the glove until you have a snug fit over the thumb joints and knuckles. Your bare left hand should only touch the folded cuff- the rest of the glove remains sterile.
- Slide your fingertips into the folded cuff of the left glove
- Pull out the glove and fit your left hand into it
- Unfold the cuffs down over your gown sleeves. Make sure your gloved finger tips do not touch your bare forearms or wrists.

ALCOHOL RUBS:

A surgical scrub with antiseptic solution for 3 minutes must be undertaken before using the alcohol – based rub. An alcohol –based rub may be used as an alternative to scrubbing with an antiseptic solution for subsequent cases. Application of the alcohol –based rub must be as per manufacturer's instruction.

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