

# PATIENT PREPARATION FOR SURGERY

## Initial skin preparation

- If the patient is to undergo limb surgery, the distal portion of the limb should be bandaged, e.g. using a cohesive bandage.
- Prepare a scrub solution of 4% chlorhexidine gluconate and warm water in equal parts in a sterile kidney dish (an alternative disinfectant such as povidone iodine can be used in patients sensitive to chlorhexidine).
- Non-sterile examination gloves should be worn to prevent cross-contamination. Using lint free gauze swabs, gently wipe the surgical site area using a methodical back and forth motion for 30 seconds, starting at the incision site and moving out to the periphery. Using a new swab each time, repeat this procedure until swabs are clean. Avoiding over-vigorous scrubbing, which can traumatise the skin and increase the risk of a post-operative infection.
- Once the surgical site area has been adequately prepped as above, the patient can be moved into the operating theatre. A sterile drape should be used to cover the sterile site whilst the patient is moved through to the theatre.

## Preparation of the patient's skin should comprise three stages:

- 1. Clipping:** This should be performed in a separate preparation area outside of the operating theatre area. This room may be used for other purposes, but it is important that it is away from the operating theatre. Clipped hair should be removed by vacuuming. Fresh clipper blades should be used for each patient (or the blades should be thoroughly cleaning and disinfected between patients). The clipper blades must not be allowed to overheat during clipping – breaks or new blades should be used for long procedures. The table and equipment should be cleaned and disinfected between patients (see notes elsewhere).  
Clipping should be thorough but gentle to avoid trauma to the skin. Even micro-trauma will increase bacterial colonisation and the risk of post-operative infection. Short remnants of hair will not impede effective preparation. Depilation creams can be considered in hard to clip areas.
- 2. Initial skin preparation:** This again should be performed in a separate preparation area outside of the operating theatre area. This room may be used for other purposes, but it is important that it is away from the operating theatre.
- 3. Final skin aseptic preparation:** This should be performed following initial skin preparation, once the patient has been moved to the operating theatre, and positioned for surgery. This should be carried out in a sterile theatre area under aseptic conditions.



## Final skin preparation

- Before removing the examination gloves, correctly position the patient appropriately for the required procedure. For limb surgery it is useful to suspend the limb to prevent contamination of the surgical site.
- Remove and dispose of the examination gloves, wash hands and replace with a pair of sterile surgical gloves.
- Another scrub solution of 4% chlorhexidine gluconate solution should be prepared (1 part chlorhexidine:1 part warm water). Again using lint free gauze swabs, the surgical site should be gently wiped using a back and forth motion for 3-5 minutes.
- The final sterile skin preparation is carried out using a solution of 2% chlorhexidine gluconate and 70% isopropyl alcohol. This can be achieved using a commercial, sterile applicator, or using a chlorhexidine solution combined with surgical spirit
- If using a commercial, sterile applicator, remove the applicator from the sterile wrapper and hold the sponge facing downwards. At the incision site, press the sponge gently against the patient's skin once and hold in place for a few seconds to allow the solution to be absorbed into the sponge. Apply the solution from the applicator onto the patient's skin using a back and forth technique for at least 30 seconds over the incision site before moving outwards towards the periphery.
- Allow the area to dry - it now ready to be draped. The patient's final skin antiseptic preparation is complete
- Any adverse reactions to skin antiseptic agents should be reported in the practice's adverse event reporting system.