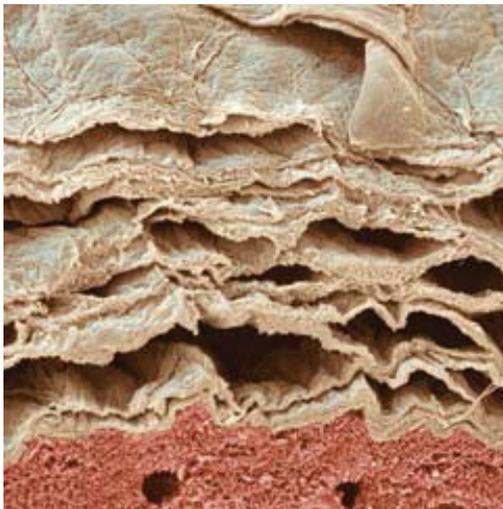


Best practice in performing

Preoperative Patient Preparation

The primary source of surgical site infections is the patient's own skin flora¹. Every time the skin is incised or punctured a portal of entry for microorganisms opens. Effective skin antisepsis aims to reduce the maximum number of transient and resident flora on the skin.



However the skin is not a flat simple surface and to achieve adequate reductions in bacterial counts requires robust protocols to ensure sufficient preparation has occurred prior to surgery.

Additionally, when considering skin preparation protocols, it is important to avoid as many routes of contamination as possible.

The potential for a patient to contaminate another patient, a healthcare worker or the environment is a real risk and the number of MRSA cases being reported is increasing².

Clipping

This should be performed outside of the theatre in a preparation area. Clippers should be cleaned with appropriate tools and agents prior to contact with the patient. A common failing is not regularly replacing brushes used to clean the clippers.



Clipped area should be confirmed verbally with the veterinary surgeon. The clippers should be first used in the direction of the hair.



A close clip is then achieved by using the clippers against the direction of the hair.

Removal of clipped hairs can be achieved by use of a small vacuum cleaner or by tack roller. Hairs around the patient on the table should also be removed.

Initial skin preparation

This should be performed in the preparation area with the goal of removing superficial organic matter and debris.

79%
Unaware of dilution rate

To avoid contamination spread, non-sterile gloves should be worn during this procedure.



In a recent study 79% of nurses were unaware of the dilution rate of scrub solution used³. It is recommended to prepare a solution of 4% CHG and warm water in equal parts (to avoid chilling the patient). Using swabs, scrub the incision area in a methodical back and forth motion moving outwards to the periphery. Repeat the procedure until the site is clean.

Subsequently move the patient to the theatre and position before disposing of gloves.

Final skin preparation

This should be performed in the theatre wearing sterile gloves. Traditional methods of prep have included re-scrubbing the patient or applying an alcohol spray or rinse.

However rinsing or spraying the surgical site does little more than soak the area⁴ and the use of multi use containers poses a significant risk of contamination.

Scrubbing patients for a second time may lead to micro-abrasion of the skin which is implicated in raising bacterial skin counts.

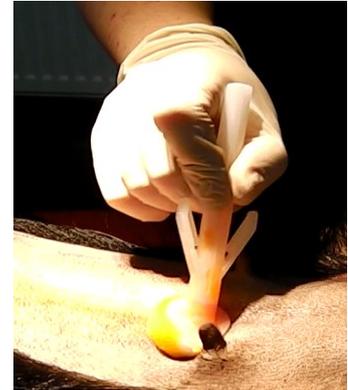
Recommended antiseptic agents

Current evidence has demonstrated that a combination of 2% chlorhexidine gluconate and

70% isopropyl alcohol provides superior anti-microbial activity than other skin antiseptics⁵.

The speed of kill is rapid and if applied correctly can give a residual action of up to 48 hours.

A pre-filled, sterile, single use applicator should be used to avoid patient contamination⁶.



Application should be made in a back and forth motion to provide friction and has been shown to reduce bacterial counts significantly when compared to concentric prep methods.

The recommended contact time for a 2% CHG / 70% IPA solution is 30 seconds with friction. Therefore application should focus on the incision site and immediate surround for 30 seconds prior to covering the peripheral area.



Finally the surgical site should be allowed to dry prior to incision.

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