2. Which of the following is correct about owners during a prolonged hospital stay for their pet?
 - (A) They should be discouraged from visiting
 - (B) They should be encouraged to visit to practice managing their pet's needs
 - (C) They should be informed about their pet's mobility at the time of discharge
 - (D) They should be advised on assistive mobility aids at the recheck appointment
3. Which change to the home environment would be unsafe for the postoperative patient?
 - (A) Placing non-slip mats on slippery floors
 - (B) Installing a stair gate on the bottom of the stairs
 - (C) Placing the dog's bed upstairs in the bedroom
 - (D) Making sure the dog's bed is on a non-slip surface

Skin prep: is there a RIGHT way?

Sam McMillan

In terms of patient preparation, the aim is to minimize the hazard of both transitional and commensal pathogens to minimize the risk of patients undergoing surgery developing an SSI. It is estimated that approximately 40–60% of SSIs are preventable. Prevention must involve removing transient organisms and reducing the commensal microorganisms, whilst preventing multiplication of microorganisms at the incision site, and preventing contamination from other sources, such as the hands of surgical personnel.

There have been many developments over the last 5–10 years regarding the way we prepare our patients for surgery. Whilst some protocols are now standardized, such as the use of lint-free swabs for the initial skin preparation, many others, such as skin preparation technique (back and forth versus concentric circles) and antiseptic solution, remain the subject of some debate.

The aim of preoperative skin antisepsis is to reduce the risk of SSIs by removing soil and transient organisms from the skin. Surgical site skin preparation should be done in two stages. The first removes gross dirt and grease from the skin surface, providing initial antisepsis, and is performed in the preparation area following hair removal. The second constitutes a final skin antiseptic applied in an aseptic manner once the patient is positioned in theatre.

The solutions used in veterinary medicine to prepare the skin surface are antiseptic agents. Antiseptic agents can be defined as chemical solutions applied to living tissue which remove transient microorganisms and reduce the number of commensal organisms. The surface of the skin is far from sterile and this is probably even more evident in our veterinary species, so the idea is to minimize opportunistic pathogens as much as possible.

This lecture will summarize current protocols for surgical skin preparation, including bathing, hair removal,

skin antisepsis and skin preparation techniques, with a focus on the current evidence base in both human and veterinary medicine.

KEY LEARNING OBJECTIVES

- The importance of patient preparation in minimizing surgical site infections (SSIs)
- Evaluate the current evidence base for surgical site preparation methods
- Consider whether standardizing protocols reduces infection risk

MULTIPLE CHOICE QUESTIONS

1. Which of the following skin preparation solutions is recommended for the second skin preparation prior to surgery?
 - (A) Povidone–iodine 0.5%
 - (B) Chlorhexidine gluconate 2%
 - (C) Chlorhexidine gluconate 2% in 70% isopropyl alcohol
 - (D) 70% isopropyl alcohol
2. Which of the following would NOT be an ideal property for a skin antiseptic?
 - (A) No residual action
 - (B) Cost effective
 - (C) Non-irritant to tissues
 - (D) Minimal contact time
3. Which of the following is true with regards to presurgical hair removal in dogs and cats?
 - (A) A size 10 clipper blade should be used for most cases
 - (B) A razor is the most appropriate method for hair removal
 - (C) Non-sterile gloves should be routinely worn for clipping
 - (D) Hair should be removed prior to induction in all cases