Surgical/Theatre

The negative effects of immobilization are vast and include changes to circulation, skin integrity, respiratory function, muscle strength, range of movement and overall mobility and function, any of which could result in an increased length of hospital stay. The easiest and most effective way to manage these negative changes is prevention. This is where physiotherapy can be of real value in the acute setting.

There are some absolute contraindications to early mobilization, such as unstable fractures or active bleeding, which are important to understand. However, most patients can be safely mobilized with careful assessment of their needs, following appropriate precautions relating to their condition/surgery and correct handling and use of equipment. The level of mobility carried out will vary from patient to patient, for example, it may not be appropriate to get the patient up and walking outside but it would be appropriate to help them into a supported sitting position.

KEY LEARNING OBJECTIVES

- Understand the role of physiotherapy and rehabilitation in an acute hospital setting
- Understand how physiotherapy/rehabilitation can be appropriate for any patient whose mobility is compromised, regardless of condition/surgery

- Explain how early intervention and early mobilization can help to reduce the negative side effects of immobility or reduced mobility

MULTIPLE CHOICE QUESTIONS

1. What are secondary complications of recumbency minimized by?
(A) Early mobilization
(B) Pain management
(C) Weight loss
(D) Crate rest
2. Physiotherapy treatment is not appropriate for which patients?
(A) Those who are non-weight-bearing
(B) Those who have had surgery the previous day
(C) Those who are in ICU
(D) Those who have an unstable fracture
3. Physiotherapy can be beneficial for patients with which conditions?
(A) Orthopaedic conditions only
(B) Neurological conditions only
(C) Impaired mobility regardless of diagnosis
(D) Soft tissue injuries only

Discharge planning and management at home

Annelies Scorer and Emily Ní Mhuilleoir

Discharge planning is used within the NHS to help manage hospital flow and bed spaces as well reduce the length of hospital stay for the patient. This involves organizing and planning the date and time of discharge during the preoperative assessment, and making sure the patient has everything they need in place for when they get home. This is obviously done to some extent in every veterinary practice and hospital, however there are some considerations and planning that could be undertaken to make sure this is a smooth process and reduce the risk of complications or readmissions.

The key element to successful discharge planning is clear communication with the owner. When planning elective surgery, the owner should be advised at the time of the preoperative consultation about postoperative restrictions and equipment they might need, when they can expect to pick up their pet and any further appointments or costs that may be involved. The owner should be prepared for their pet to have reduced function and mobility for a period of weeks to even months and to provide some degree of nursing care in the acute stages. This process is slightly more complicated when the patient has been admitted for emergency surgery.

However, once the patient is stable, the whole team and owner should be working together to try to discharge the patient as soon as possible. It is important to have realistic expectations about what the owner can and cannot manage with at home, for example, owner's own mobility, working hours, home environment, as these can all cause barriers to successful discharge. The physiotherapy and nursing teams have the potential to play an important role in preparing owners for discharge and to manage their pets at home.

KEY LEARNING OBJECTIVES

- Explain the barriers and challenges to a successful discharge from hospital
- Understand the role of the physiotherapy and nursing teams in helping to ensure a successful discharge
- Advise owners on ways to manage their pets at home during a period of convalescence

MULTIPLE CHOICE QUESTIONS

1. When planning elective surgery, when should the owner be first informed about crate resting their pet?
(A) At the postoperative recheck appointment
(B) At the preoperative consultation
(C) At the discharge appointment
(D) Over the phone once they get home with their pet

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