Preventing and treating surgical site infections

By Lynne Pearce

Essential information
According to the National Institute for Health and Care Excellence (NICE), at least 5% of patients having a surgical procedure will develop a surgical site infection (SSI), yet most are preventable. Infections range in severity from wound discharge, happening within 7-10 days of an operation, to a life-threatening post-operative complication. SSIs can significantly affect a patient’s quality of life, causing pain and discomfort, delaying healing and recovery, and potentially extending hospital stay.

What’s new
In April, NICE published updated guidance on SSIs, replacing its 2008 document. New or updated recommendations include nasal decolonisation before surgery, which NICE says should be considered based on factors such as procedure type, individual patient risk and the potential effect of infection.

Guidance on antiseptic skin preparation during surgery has also been updated, with a table to inform decisions. Specifically, the guidance warns of the risks of severe chemical injuries with the use of chlorhexidine in preterm babies. Other new recommendations focus on antiseptics and antibiotics before wound closure, alongside methods of closing wounds.

In addition, NICE includes recommendations on information that should be given to patients and carers; what happens before, during and after surgery, treating SSIs and specialist wound care services.

The guidance makes a number of recommendations for further research. These include the clinical and cost-effectiveness of various methods of antiseptic skin preparation, and the effectiveness of nasal decolonisation.

Recommendations for post-operative care remain unchanged since the 2008 guidance was issued. These include using an aseptic non-touch technique for changing or removing surgical wound dressings, using sterile saline for wound cleansing up to 48 hours after surgery and advising patients they may shower safely 48 hours after surgery.

Implications for nurses
Nursing staff caring for patients before, during and after surgery have a key role in advising them about the risks associated with SSIs and how any infection will be managed.

As patients are allowed home earlier, increased numbers of infections are now being seen in primary care. This means community staff are particularly important in monitoring for signs of infection and educating patients on how to care for their wound after discharge.

Listening to the patient is vital in assessing potential SSIs, alongside recognising local signs and symptoms, including heat, redness, pain, swelling, green or yellow pus and fever.

Lynne Pearce is a health journalist

‘Surgical site infections are not just the business of specialist nurses. Nurses will have to manage surgical wounds in many different settings, especially as patients are often in hospital for a short time only.

‘In many cases, infection happens outside the hospital ward or clinic. As a result, all nursing staff need to be aware of the signs and symptoms and be able to respond to them at an early stage.

‘Clinical assessment skills are vital. We shouldn’t immediately resort to antibiotics without this appropriate assessment. Listen to your patient and if they say their wound doesn’t feel right, take the time to assess.

‘But remember, unless there is pus, one lone symptom doesn’t necessarily indicate infection. For example, many wounds may become red as part of the healing process.’