Wound Care

KEY POINTS

- Malignant ulcers or wounds can be caused by direct invasion of the skin by a primary tumour or by metastasis to the skin
- Malignant wounds occur in 5-10% of patients with advanced disease, most commonly in breast cancer
- These wounds can have both ulcerative and fungating features
- Odour and discharge are common problems with malignant wounds
- Pain, infection, and bleeding can also occur
- The psychological distress to the patient or caregivers caused by these wounds should also be addressed
- These wounds rarely heal, but the symptoms can usually be controlled with good assessment and management

- Malignant wounds are relatively rare in children; they occur primarily with solid tumours, particularly when treatment with chemotherapy and/or radiation has been limited

ASSESSMENT

See comment on page 10

- A clinical assessment is usually all that is required
- It is important to review the symptoms of odour, discharge, pain, bleeding, and psychological impact when assessing the wound. Wound location, size, and condition of the surrounding skin should also be assessed
- Wound cultures can sometimes be helpful in determining the need for antimicrobial treatment
- Local bacterial colonization of the wound is expected and should

be treated with topical cleansing, debridement as appropriate, and antimicrobial creams

- If there are signs of systemic infection, the use of PO or IV antibiotics may be considered
- The potential for serious complications, such as haemorrhage, should be evaluated and a plan developed for management

MANAGEMENT

Cleaning the Wound

- Gentle irrigation of the wound with saline or cooled boiled water is helpful and can be done as often as needed, generally daily or every 2 days
- DO NOT USE antiseptic or antibacterial washes on open wounds, as these harm newly developing skin cells which are important for wound healing
- Local debridement can be done by very gently rubbing the necrotic areas with gauze saturated with saline. This must be done carefully and gently to avoid bleeding or pain
- Proper cleaning reduces odour by removing necrotic tissue and decreasing bacterial counts

Managing Exudate or Discharge

- Inflammation and oedema from malignant wounds can cause significant exudate (drainage)
- Using absorbent dressings to absorb exudate while keeping the wound covered will reduce odour and prevent infestation with maggots
- Change dressings 1-2 times per day, based on the amount of exudate and odour
- For heavy exudate, menstrual pads or diapers can be used to absorb exudate
- For small wounds producing a large volume of exudate, a stoma appliance can be placed over the wound

Odour Control

- Wound odour is caused by bacterial overgrowth and necrotic tissue
- Managing odour is extremely important for the wellbeing of the patient and family
- Wound cleaning, debridement, and absorption of discharge (as described above) are important to reduce odour
- Metronidazole (topically or systemically) can be very helpful for reducing odour
  - **Metronidazole** crushed tablets or injectable solution applied topically to the wound; generally only 1-2 applications are required to significantly reduce odour
  - **Metronidazole 500 mg PO BID for 7 days** can also be considered

  - **Metronidazole: paediatric dosing 10 mg/kg/dose PO/IV q8h or 7.5 mg/kg/dose PO/IV q6h (Maximum: 500 mg/dose)**

- Activated charcoal dressing or charcoal in a basket placed under the bed or table can help absorb and reduce odour
- Essential oils, particularly peppermint, or incense may be helpful to mask strong odour, but can sometimes cause breathing difficulties for patients or may induce nausea

Pain

- Provide pain medication, including morphine and analgesic medications (see Pain section), prior to dressing changes to ensure good pain control
- Limit the frequency of dressing changes if particularly painful
- Give a breakthrough or rescue dose of **morphine** 15 minutes prior to the dressing change
- Malignant wounds can also cause neuropathic pain, which can be treated using the guidelines from the section on Pain

- **Topical morphine** can be helpful for some patients. **Injectable morphine (e.g. 1 mL of 10 mg/mL injectable solution) can be mixed in a water-soluble gel that may be applied** to the wound using a gloved finger or applied to a non-absorbent dressing placed over the wound up to TID

Control of Bleeding

- Tissue in a malignant wound is often friable and bleeds with minimal manipulation
- Care must be taken when removing dressings to avoid bleeding
  - Use warmed normal saline or water for irrigation to moisten the dressing and prevent trauma during dressing changes
- Use non-adherent dressings and Vaseline to reduce adherence of the dressing to the wound
- Apply direct pressure if bleeding occurs (10-15 minutes). Local ice packs can also assist in controlling bleeding
- Crushed tablets of **tranexamic acid** or **sucralfate** can be applied topically to stop bleeding
- Topical application of epinephrine can also help reduce bleeding through vasoconstriction
- Haemostatic or pressure dressings may be required severe bleeding occurs, although cost may be restrictive
- Consider radiotherapy depending on the patient and if the tumour is thought to be radiosensitive
- If the patient is at the end of life and having significant bleeding from a large wound, use dark towels to mask the blood and decrease anxiety for the patient and family. Pain control and sedation with a benzodiazepine can also be considered in this situation (see section on Bleeding)
- In cases where the risk of severe bleeding is high, consideration should be given to gently warning the family of this possibility and advising that dark towels be available nearby

Maggots (Myiasis)

- Infestation of open wounds by fly larvae (maggots) is frequent in tropical and subtropical locations
- Mechanical removal of all larvae is required to eradicate the infestation, generally this is done with forceps
- A variety of substances can be used to cause deeper larvae to migrate to the surface of the wound so they can be removed with forceps
  - Substances including animal fat, petrolatum (Vaseline), beeswax, and paraffin are effective
  - Turpentine vapours will also draw maggots to the surface (avoid touching turpentine to the wound itself)
  - The choice of agent can be guided by local availability since there is no evidence to suggest that one agent is more effective than another
- After removal of all the larvae, ensure the wound is completely covered, with particular attention to the edges of the wound and dressing
  - Frequent dressing changes and proper wound care are essential to avoid recurrence

PITFALLS/CONCERNS

- Ensure that the dressing used does not cause excessive drying of the wound, which will cause more pain and bleeding when changing the dressing

PALLIATIVE TIPS

- It is very important to pay particular attention to the emotional impact of these wounds on the patient and family
- Medical staff can help to reduce the social isolation that often occurs with strong odour by using medications to reduce odour, such as topical metronidazole

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