Ann Davies describes the wound care management of a patient with a fungating malignant wound. This paper was written as part of a tissue viability degree at the University of Hertfordshire.

**Key Words**
Fungating malignant wound
Exudate
Malodour

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**Nursing a patient with a malodorous fungating non-healing wound**

Mr Lunn, who is 59 years old, was admitted to hospital with an acute bowel obstruction secondary to an adenocarcinoma of the descending colon. During a laparotomy and colocolonic bypass Mr Lunn was found to have large plaques of cancer in the mesentery, omentum and liver, and a diagnosis of carcinomatosis was made. He declined treatment with chemotherapy. After discharge from hospital, Mr Lunn was referred to the district nursing team for assessment and nursing care of his surgical wound.

**Initial assessment** During the first visit to Mr Lunn, assessment revealed a 14cm incision, with some clips still in place. The clips had been removed from the posterior section of the wound by the surgeon the previous day and there was now a 4cm gaping wound. This wound was exuding and it had soaked through the dressing and the surrounding skin appeared slightly red. It was clear that the current dressing was unsatisfactory and Mr Lunn was distressed by the leakage of exudate onto his clothing. He also complained of the surrounding skin feeling sensitive. Wound exudate is a normal feature of tissue damage and is part of the inflammatory stage of healing (Fletcher, 2002).

The remaining clips were removed as requested by the hospital staff, and it was clear that further gaping of the wound would occur so Mr Lunn was warned that this might happen.

Two gaping wounds were now apparent at each end of the laparotomy scar. Their size and the shape were recorded and an assessment form completed so that comparison could be made at a later date if necessary. The anterior wound was 20mm long, 12mm wide and 5mm deep. The posterior wound was 40mm long, 35mm wide and 15mm deep.

Gentle wound irrigation using sterile normal saline at body temperature was carried out as the exudate had dried and was adhered to the skin and wound surface. An alginate dressing was prescribed, as it produces a hydrophilic gel when it combines with exudate, providing a moist healing environment (Timmons, 1999). The dressing was applied to the two gaping wounds and covered with foam dressing, which has low adherent properties and draws excess exudate away from the wound surface. A secondary film dressing was applied to allow Mr Lunn to shower.

On reflection, the initial choice of dressings was inappropriate as the film dressing compromised the foam dressing’s permeability. This was overlooked in an effort to meet Mr Lunn’s request for a daily shower. The selection of dressings needs to be appropriate for the care of the wound but also needs to meet the patient’s needs. It could be argued that exposing the wound to the shower water would act as a method of cleansing. However, Mr Lunn described the surrounding skin as sensitive and showering at this point may not have been comfortable.

During the following two months, both wounds showed signs of granulation. Four weeks later the anterior wound continued to improve, the edges became pink and the size decreased as epithelialisation occurred gradually. However, progress was not as marked in the posterior wound. Despite this, twice-weekly dressing changes continued and Mr Lunn and his wife’s lifestyle was not disrupted.

**Deterioration of the posterior wound** Three weeks later the posterior wound bed was covered in yellow slough with a moderate amount of exudate, which was causing the surrounding skin to become macerated. Following gentle cleansing a skin protectant spray barrier film was applied to the surrounding skin to protect it from the exudate. Saline irrigation was continued, a hydrodogel dressing was applied to the wound bed to remove the thick exudate, a hydrocolloid was used to cover this and then a film dressing was applied. The hydrogel was selected for its desloughing properties and to protect the granulation tissue in the wound. An unwanted effect was that the dressing added moisture to an already wet wound, but it was felt to be the most appropriate method of cleansing the wound bed. The hydrocolloid absorbs exudate, thereby helping to prevent maceration. This was an ideal dressing for Mr Lunn, as it promotes healing, minimises maceration and absorbs exudate.

The frequency of dressing changes was increased to alternate days and was effective in combating skin soreness. The amount of exudate was once again contained in the dressing and a balance had been reached between maintaining a moist healing environment and effectively managing to absorb the exudate.

**Diagnosis of a malignant wound** During his next clinic appointment, Mr Lunn complained of shortness of breath and a diagnosis of metastatic mucinous tumour was made. A blood test indicated that he was anaemic. Both underlying disease and anaemia can delay wound healing (Flanagan, 1997).

The district nursing team continued to redress the wound on alternate days, and the excoriated skin improved. However, four weeks later a nodule was identified at the top of the posterior wound and mild
Malodour was evident at dressing changes, so Mr Lunn was referred to the oncology clinic. The nodule grew rapidly and in one week increased in size by tenfold. At the clinic appointment the physician verified that this was a tumour growing from the wound: it was a fungating wound. Cancer cells infiltrate the epidermal and dermal tissue where they alter the structure of the skin and nodule or ulcer can develop (Young, 1997).

Mr Lunn commenced radiotherapy treatment with encouraging results. The tumour decreased in size during the next six weeks and less exudate was noted. The radiotherapy treatment is palliative rather than curative, and this was explained to Mr Lunn and his wife.

Dressings were carried out twice weekly again as the lesion became smaller and the amount of exudate decreased. An adhesive foam dressing was selected to dress the wound as it was waterproof, absorbent, and conformed to body shape. Grocott (1998) asserts that the management of fungating wounds depends on a careful fit and effective absorbency of the dressing.

Holistic assessment Mr Lunn’s lesion grew back eight weeks after radiotherapy treatment had been completed. Malodour then became a further problem for him to contend with. Haughton and Young (1995) assert that a fungating wound is the ultimate insult to an individual’s body image. Pudner (1998) discusses the need for a holistic assessment to establish how the wound affects the patient, family and friends, and its effect on the patient’s body image. Fortunately Mr Lunn’s lesion could be hidden by loose shirts and he felt that he could ‘ignore’ it when dressed. However, he was concerned that odour could be detected by others and this caused him embarrassment. Mr Lunn had already received the maximum dose of radiotherapy and, therefore, was unable to have further treatment.

Malodour acts as a constant reminder of patients’ pain and cancer (Price, 1996) and is often one of the most distressing complications of their wounds. Thomas et al (1998) discuss the psychological impact of fungating wounds on patients and how these tumours may cause social isolation. It was vital to ensure that Mr Lunn’s dressing would mask any odour so that he could continue his activities as desired.

Clark (1992) explains that the misery of advanced uncontrolled disease deepens a person’s sense of helplessness, worthlessness and social isolation at a time when the support of friends and family is crucial. Odour carries a social stigma and can inhibit intimacy, resulting in depression.

Benbow (1999) explains that wound odour should be observed and documented as part of the wound assessment, although accuracy is difficult as an individual’s perception of smell can be subjective. At this time the nurses were unaware of an odour assessment tool and recorded the amount of odour by using plus signs or by describing the amount as minimal, moderate or large. On reflection, the use of a tool for assessing and recording the presence of odour, such as that described by Baker and Haig (1981), would have been a more accurate way of recording the amount of odour present and would have avoided the subjectivity of the nurses.

Management of malodour The use of a gel containing metronidazole 0.8 per cent topically is thought to be effective in the management of odour, as it prevents aerobic and anaerobic bacteria from multiplying (Hampson, 1996). After discussion with Mr Lunn and his GP, a decision was made to use topical metronidazole applied sparingly to the tumour, which was now about 50mm long and 60mm wide, filling the wound bed and protruding by approximately 15mm. The wound was dressed with an adhesive foam, which we hoped would seal the dressing to the skin to prevent odour escaping. However, this was ineffective and in a further attempt to eradicate the odour, a different dressing designed to reduce both odour and absorb exudate—Carboflex—was placed directly on to the area and taped in position as recommended by Thomas et al (1998). Grocott (1999) emphasises the importance of completely sealing the edges around the dressing to prevent the escape of malodour.

We are continuing to use Carboflex with good effect. The only disadvantage is that it is not water resistant, but nursing visits are timed to follow Mr Lunn’s shower, and dressings are changed daily in order to maintain comfort and freshness. Mr Lunn is aware that his fungating wound will not heal, but tells the nursing team that he feels confident with the way his wound is dressed— that it will not leak fluid or smell.

Conclusion This case study has focused on the care given to a patient in the treatment of a non-healing postoperative wound due to underlying cancer which has caused the wound to fungate. The wound assessment, along with the selection of dressings to deal with the exudate and protection of the surrounding skin were important aspects of care. Consideration also had to be given to the physical and psychological needs of Mr Lunn and his wife, who had to cope with a fungating malodorous wound.