The nursing management of patients with malignant fungating wounds can often be described as both exhausting and rewarding (Collier, 2000). The patients’ dignity and quality of life takes precedent, but staff should also have a positive approach to wound management and address the problems at the wound bed, i.e. removal of slough and reduction of malodour (Bale and Jones, 1997). When choosing wound management products it is important that an holistic assessment of the patient is made and that his/her needs are met, as well as addressing the wound's problems.

**FUNGATING WOUND MANAGEMENT**

Primary, secondary or recurrent malignancy can result in the formation of a fungating malignant wound (Mosley, 1988). These types of wounds are generally linked with carcinoma of the breast. The two case studies presented in this article one involves the breast and the other a non-Hodgkin’s lymphoma of the skin infiltrating the axillae.

On a larger scale, the prevalence of these types of wounds is not yet known. However, what is acknowledged is the considerable amount of nursing time spent on caring for these patients, in terms of not only wound care assessment and management, but also sociological and psychological support (Sims and Fitzgerald, 1985).

Fungating wounds result from the infiltration and proliferation of the epidermis by malignant cells (Mortimer, 1993). The origin of the fungating wound may evolve from the site of the primary lesion or from a secondary or recurring malignancy. They can grow quite quickly and become invasive, ulcerated or form shallow craters (Collier, 1997). These wounds can also infiltrate other tissue, blood and the lymphatic system (Grocott, 1993).

Tumour formation is associated with irregularities in the blood supply to the lesion and surrounding tissues, yet it is widely recognized that this process is not fully understood (Morison et al, 1997). However, this infiltration of blood and lymphatic vessels contributes to fluctuations in blood and lymphatic flow, creating tumour hypoxia and increased interstitial pressure, which can lead to increased levels of necrotic tissue, vascular collapse and lymphoedema (Collier, 2000).

Mortimer (1993) also highlights a further complication of wound infection, owing to the presence of anaerobic bacteria cultivating on the necrotic tissue. This creates challenges for both nurse and patient as the malodour and heavy exudate often associated with these types of wounds can be attributed to the end product of metabolism (volatile fatty acids) and activity of bacterial enzymes called proteases (Mortimer, 1993). Collier (1997) suggests that stagnant exudate increases malodour at the wound site.

**PATIENT CARE**

It is important before deciding on treatment to take into consideration the underlying pathology of the tumour, body site and a multidisciplinary clinical decision-making between patient, nurse specialist, physician, surgeon, oncologist, radiologist and palliative care specialist. Treatment options can be a single or combined therapy of surgery, radiotherapy, chemotherapy, neutron therapy, hormone therapy and laser therapy (Grocott, 1995).

Holistic patient assessment is imperative to effective wound management. It is important
GLYCERINE-BASED HYDROGEL SHEET (NOVOGEL)

Novogel (Southwest Technologies Inc) is a glycerine-based hydrogel sheet and is made from 65% glycerine, 17.5% polyacrylamide and 17.5% water, with an outer covering of a four-way stretch lycra fabric. The properties of this dressing are that it is highly absorbent (3–4 times its own weight), bacteriostatic, fungistatic, softens necrosis, absorbs odour, is immunomodulating, and provides cushioning (protection against shearing forces). These properties indicate the use of this dressing in the treatment of moderate to highly exudating wounds, e.g. fungating wounds, burns, and leg ulcers.

The goal of palliative care “is achievement of the best quality of life for patients and their families” ...so it is vital to address not only the wound management needs but also the needs of the patient to avoid unnecessary suffering...

Table 1. Problems affecting quality of life in patients with malignant fungating wounds

<table>
<thead>
<tr>
<th>Problem</th>
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<tbody>
<tr>
<td>Excess exudate, leakage and soiling of clothes</td>
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<tr>
<td>Malodour, which may result in isolation and nausea</td>
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<tr>
<td>Bleeding</td>
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<td>Fear</td>
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<td>Pain at dressing change</td>
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<td>Bulky dressings</td>
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<tr>
<td>Inconvenience</td>
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Figure 1. Fungating cancer of the right breast and chest wall.

Figure 2. Fungating non-Hodgkin’s lymphoma of the right axillae and chest wall.
The contraindications of using this dressing are for those patients who have a hypersensitivity to glycerine. Caution should be taken when using Novogel with infected wounds. Novogel may be used on infected wounds, but systemic antibiotics should be prescribed and the wound should be checked for clinical signs of infection every 24 hours.

To use the dressing one should select the size which allows overlap of the wound edges by at least 2–4 cm. The wound site should be cleansed as per wound care guidelines and the dressing applied either as a whole sheet or, if there are crevices, cut smaller pieces to half-fill these gaps (remove the plastic backing and lycra if using smaller pieces to fill in gaps). When applying as a whole sheet, roll the dressing on to the wound and smooth it gently into place. Secure with tape, or a secondary hydropolymer dressing or use both. If the patient has a sensitivity/allergy to adhesives, a tapeless vest is useful and comfortable for the patient.

As exudate is absorbed the gel sheet becomes rubbery and swollen but maintains its integrity. Removal is simple, as the dressing does not stick to moist areas and does not damage new tissue growth. Just remove the adhesive tape or vest and roll back the dressing. Frequency of change depends on the type of wound, the amount of exudate and the needs of the patient. Common reasons for dressing change include if the patient describes that the dressing feels heavy, the dressing appears swollen or if there is leakage of exudate. Discontinue use if there are any signs of hypersensitivity.

CASE STUDY 1
Bessie was a 72-year-old woman who was referred by ward staff for the management of a fungating lesion to her chest wall. She was under the care of the breast consultant and was on tamoxifen, a commonly used hormone treatment for women with secondary breast cancer, to try and shrink her tumour in size. The lesion had been present for over 15 years and Bessie had never consented to any other treatment other than tamoxifen.

Bessie had been experiencing increased amounts of exudate, and the odour was preventing her from running her stall on the local market. Her lesion was increasing quite rapidly in size, but Bessie was an optimist and as long as she could get out and about she did not mind the lesion.

She had been admitted to hospital after a large bleed which had now settled after using topical adrenaline (1:1000 as a topical gauze-soaked dressing). The staff were using metronidazole gel (Metrotop Gel, SSL International) for the odour control, an alginate (Kaltostat, Convatec) and a foam dressing (Allevyn, Smith & Nephew), yet they felt that the exudate was not being managed and the smell was still extremely offensive.

On assessment, Bessie’s own needs were to have a dressing that debulked the mass of lint she was personally buying from the pharmacy and realign her body shape (at home she would not go out without putting extra padding over the dressings performed by the district nurses). To look good cosmetically, she wanted to wear a v-necked t-shirt and not the lacy collared blouses she was at present wearing, and she also wished to reduce the odour as her perfume was not strong enough to cover the odour any more.

Her lesion was covered in necrotic tissue and was extremely large in size (20 cm x 24 cm) and was raised at least 6 cm over her chest wall (Figure 1).

Novogel was used as the primary dressing of choice, Cavilon Durable Barrier Cream (3M) to her surrounding skin and Allevyn foam (Smith & Nephew) secured with a Tapeless V-shaped vest. A breast prosthesis was used to fill out the other side of her chest to realign her body shape. Within 24 hours Bessie was relieved and commented on how pleased she was that she could not smell the lesion any more. Also, the exudate had settled and she could put on her t-shirt.
The dressings were redressed every 48–72 hours. On her return home from hospital Bessie went back to reopening her stall on the market and was busy for the rest of the summer. She discontinued buying lint from the pharmacy and would not let anyone change the dressing regime.

**CASE STUDY 2**

Abdul was a 24-year-old man who was admitted from India after being diagnosed with suspected tuberculosis of the axillae. He had undergone plastic surgery in India and had a latissimus dorsi flap to cover the defect. On arrival at North Manchester, he underwent further investigations and was diagnosed as having non-Hodgkin’s lymphoma and was commenced on chemotherapy.

The chemotherapy was initially as a treatment, but soon became palliative as the disease had infiltrated both lungs and his condition deteriorated. Also, the wound was infected with a resistant strain of pseudomonas and was being treated unsuccessfully with antibiotics and various topical treatments (e.g. cod liver oil and honey tulle, a hydrofibre dressing, an alginate dressing, and a hydrophilic cream containing silver). It was the wish of Abdul and his family to fly back to India to die. They wanted the wound to be dressed so that it would reduce the odour and manage the copious amounts of exudate during his stay in hospital, the flight home and his last days with his family.

Novogel was cut in order to be packed into the cavity and then laid over the rest of the lesion. Abdul died 3 days after arriving home in India, with his family at his side.

**CONCLUSION**

The nursing care of a patient with a malignant fungating wound can be challenging and rewarding (Collier, 2000). Although the outcome for both of these patients were different, their needs were similar with regard to exudate and odour control. As stated earlier in this article no statistical evidence can be gleaned from these two case histories, but they do show that the quality of care of these patients was enhanced through the use of the dressing regime implemented.

**KEY POINTS**

- Fungating wound management requires an holistic approach to the patient’s physical, psychological and sociological needs.
- A glycerine-based hydrogel sheet provides the nurse with a dressing that addresses the many problems associated with a fungating wound.
- Management of these types of wounds is both taxing and satisfying and patients’ dignity and quality of life must override all other nursing issues.