Palliative Surgery for Advanced Fungating Skin Cancers

Masaki Fujioka, MD, PhD; Aya Yakabe, MD

Abstract: Advanced skin cancers sometimes develop complex wounds with associated pain, infection, malodor, massive discharge, and bleeding, which distresses patients and decreases his or her quality of life (QoL). The following cases presented large fungating skin ulcers that were treated with palliative abrasion along with wound resurfacing using free skin grafting. Palliative surgery allowed the patients to lead a more comfortable daily life at home with family. Simple palliative surgery can improve the QoL of terminal patients by reducing wound secretion, odors, and the risk of infection, and consequently, can improve nutritional status and their overall health condition.

Approximately 5%–10% of patients with breast cancer and advanced skin cancer will develop a fungating wound.1 If the cancer is in an advanced stage, curative treatment such as radical abrasion is often not preferred, but a range of palliative radiotherapy and drug therapy may be attempted.2 In these cases, a chronic complex wound that is typically infected, malodorous, and has massive discharge and bleeding, must be treated with local wound management techniques. The goal of treatment should be to optimize QoL in these terminal patients, but fungating wounds sometimes cause a patient distress and prevent him or her from living at home.3

Two cases of large fungating ulcers resulting from breast cancer and malignant melanoma, which were treated with palliative resection and free skin grafting, are presented. The outcome, in terms of improving each patient’s QoL, was successful in both cases.

Case Reports

Case 1: A 75-year-old woman had been examined at the Department of Surgery (Nagasaki Medical Center) complaining of a lump located on the right breast. Two tumors were identified: one measuring 10 cm × 9.5 cm at the right axilla and another measuring 7 cm × 6.5 cm in the right breast, both of which were hard, round, and protuberant. Histological analysis of a biopsy indicated nipple duct carcinoma. A surgeon evaluated the patient and recommended regular follow-up and treatment with cytotoxic and endocrine agents because the breast cancer was at an advanced stage. The
tumors rapidly enlarged and developed a fungating wound over a 6-month period. The patient consulted the authors to manage the complex wound.

Upon examination the 23-cm x 21-cm hard tumor of the right breast had developed into a fungating wound with infection, had an unpleasant odor, and showed massive discharge and bleeding. Another 13-cm x 1-cm, hard, red, round, protuberant tumor, with a firm underlying subcutaneous layer, was revealed at the right axilla (Figure 1A). Computed tomography (CT) showed that the latter mass had invaded the pectoralis major muscle and periosteum of the ribs, but distant metastasis, including lung neoplasm, were not recognized at this time (Figure 1B). Analgesics and sedatives allowed the patient to walk and move, but the unpleasant odor, massive drainage, and local bleeding, which caused severe cachexia, malnutrition, and anemia prevented the patient from living at home.

Considering the nature and prognosis of the patient, surgery consisted of palliative amputation of the breast tumor along with wound resurfacing using free skin grafting, which was deemed to be the least invasive procedure to alleviate the problems. The tumors associated with the pectoralis major muscle were removed, and a thin-thickness (about 9/1000 in) split-thigh skin grafting was performed.

The wound had mostly resurfaced 3 weeks following skin grafting. The wound surface remained dotted and raw, but did not show signs of infection, bleeding, necrotic tissue, or odor, and had minimal discharge (Figure 1C). The patient’s general condition improved over the next 3 weeks. She was discharged 4 weeks after surgery, and the remaining raw surface was treated with ointment at home. The patient visited the authors’ hospital once or twice a month to receive palliative care and wound treatment for 7 months, but unfortunately died of lung metastasis and relapse of the breast tumor 8 months after surgery.

Case 2: A 29-year-old man had been examined at the Department of Plastic and Reconstructive Surgery (Nagasaki Medical Center) complaining of a lump on the right waist, which had enlarged and developed a fungating wound of 6 months’ duration. Initial examination revealed a 13 cm x 12 cm hard tumor that was fungating with infection, was malodorous, and had massive discharge and bleeding (Figure 2A). Histological analysis of a biopsy indicated amelanotic malignant melanoma. CT showed that the mass had invaded the external oblique muscle and extended to the inguinal lymph node (Figure 2B). Furthermore, multiple liver metastases were recognized.

Analgesics and sedatives allowed the patient to walk...
and move freely, but the unpleasant odor and massive drainage prevented him from living at home. Thus, surgery consisted of palliative amputation of the skin tumor along with wound resurfacing using free skin grafting. The tumor with associated extra oblique muscle was removed, and a thin-thickness (about 9/1000 in) split-thigh skin grafting procedure was performed. The wound had resurfaced by 3 weeks after skin grafting (Figure 2C). The patient’s general condition improved over the next 3 weeks. He was discharged 4 weeks after surgery without any remaining wound. The patient visited the hospital once or twice a month to receive palliative care for 4 months, but died of brain metastasis 5 months after surgery.

Discussion

When a malignant skin tumor does not respond to usual treatments such as radical surgery, radiotherapy, or chemotherapy, many of these terminal patients are left with a growing tumor, which sometimes develops into a chronic, complex wound. Wound healing is often unachievable in this condition; conversely, the wound shows fungal growth and is heavily exudative, malodorous, and bleeds easily when advanced.4 Only palliative treatment such as local wound management is applicable for these ulcers, which causes patients and relatives significant distress. Massive, malodorous exudate may sometimes prevent a patient from living at home. Consequently, the QoL of terminal patients cannot be improved under these circumstances; for these patients, palliative abrasion of the tumor is sometimes a reasonable option.4

Several criteria are indispensable for performing palliative surgery. First, the surgery should reduce the patient’s distress and improve the circumstances effectively. Second, the patient should understand his or her condition and desire to receive the surgical therapy because palliative abrision is not a curative treatment. Third, the surgery should be performed simply and easily within a short period and with little bleeding, considering the poor general condition of terminal patients. The goal of palliative surgery is to optimize the QoL of patients who are terminally ill. In the presented cases, both the patients and families wished to undergo the palliative abrasion of malignant fungating wounds, and consequently, the surgeries allowed the patients to lead a more comfortable daily life for the last 6 months (Case 1) and 4 months (Case 2) at home with family.

According to the operative plan, en bloc resection of the underlying muscle was performed, which is a simple method that can reduce the intraoperative bleeding and shorten the operative period. Free skin grafting, which was the least invasive technique, was chosen for wound resurfacing.

Studies on pain control and nursing care at home for terminal patients have advanced.1-4,5-7 Regrettably, invasive medical treatment for terminal patients has not advanced. However, surgeons may be able to improve the QoL of these patients with malignant complex wounds through conservative treatment and nursing care.

Conclusion

Two cases of palliative abrasion surgery along with wound resurfacing using free skin grafting for 2 patients
with giant malignant skin tumors were presented. Simple palliative surgery can improve the QoL of terminal patients by reducing wound secretion, odor, and the risk of infection, and consequently, can improve the nutritional and general health condition of these patients. Palliative abrasion is sometimes a reasonable option, especially for patients with malignant, fungating, complex ulcers.

References