

**Malignant fungating wounds** (MFWs) refer to tumors caused by aggressive cell proliferation into the skin, blood, and lymph vessels that cause damage, hypoxia, and necrosis.<sup>1</sup> These tumors usually occur in the last six to 12 months of life among patients with advanced or metastatic cancer, and they are considered non-healing wounds.<sup>2</sup> MFWs are most frequently associated with breast cancer and head and neck cancer, but they are likely underreported due to negative emotions associated with these skin manifestations.<sup>3</sup> The incidence and prevalence of MFWs are expected to increase because innovative treatments are helping an aging population to live longer with cancer.<sup>3,4</sup>

Initially, an MFW may present as a plaque of erythematous skin that develops into a protruding nodular growth resembling a piece of cauliflower or ulcerating crater.<sup>5</sup> Given their proliferative nature, these wounds rarely heal, and management is focused more on symptom management that hopefully improves quality of life. Pain with multiple contributing factors is often the most physically distressing symptom of MFWs, along with malodor, bleeding, pruritus, and the amount of exudate.<sup>4,6</sup> Unfortunately, no perfect dressing exists that can address all of those symptoms collectively. Furthermore, the shape, location, and concerning symptoms often make wound management difficult.<sup>4,7</sup>

MFWs are also associated with significant distressing psychosocial symptoms, such as depression, embarrassment, negative body image, shame, low self-esteem, and self-withdrawal from friends and family.<sup>4,8,9</sup> For example, women with breast cancer and MFWs have reported that they find malodor and exudate to be shameful and embarrassing as well as a constant reminder of their disease.<sup>8</sup> Intimacy and physical closeness to partners can also be impacted.<sup>10</sup> It has been reported that the psychosocial impact of MFWs can cause more suffering than the actual cancer diagnosis.<sup>11</sup>

A comprehensive, patient-centered approach is needed to support individuals with MFWs. The goals of wound care should focus on what can be done to improve the patient's quality of life and independence.<sup>12</sup> Management of MFWs should not only focus on the physical symptoms but also include regular assessment of the patient's psychosocial status. One systematic approach suggested by Tilley and colleagues is PALCARE.<sup>3</sup> PALCARE includes Prognosis; Advance care planning; Living situation (including caregiver availability, ability, and participation); Comprehensive history

(medical, psychiatric, social, and spiritual); Assessment of the wound; Recommendations for symptom management; and Education of patient, family, and involved hospice staff.<sup>3</sup>

Another useful framework for the physical symptoms often associated with MFWs is the HOPPES criteria by Kevin Woo.<sup>13</sup> HOPPES represents Hemorrhage, Odor, Pain, Pruritus, Exudate, and Superficial infection.<sup>13</sup> See Table 1 for suggestions on management of each of the symptoms. Also, do not forget the importance of periwound management. MFWs with copious amounts of drainage can cause periwound moisture-associated dermatitis, which can contribute to pain and pruritus.<sup>3</sup> Periwound management is just as important as the MFW itself. Lastly, clinicians should perform ongoing assessments and adjust the wound-management plan of care because of the ever-evolving status of fungating tumors.

**Table 1. Options for Management of Malignant Fungating Wounds** <sup>3-5, 12-15</sup>

HOPPES	Possible Treatment Options
<b>Hemorrhage</b> (from friable tissue)	<ul style="list-style-type: none"> <li>• Non-adherent dressings such as contact layers or petrolatum gauze</li> <li>• Tranexamic acid soaks</li> <li>• Silver nitrate</li> <li>• Calcium alginate dressings (Note: Silver alginate is not hemostatic.)</li> <li>• Collagen dressings</li> <li>• Oxymetazoline</li> <li>• Chitosan hemostatic dressing</li> </ul>
<b>Odor</b> (from proliferation of bacteria, tissue necrosis)	<ul style="list-style-type: none"> <li>• Metronidazole</li> <li>• Petrolatum/3% bismuth tribromophenate</li> <li>• Products for infection management (e.g., honey, silver)</li> <li>• Charcoal dressing</li> <li>• Use of cleansers (e.g., hypochlorous acid, sodium hypochlorite, acetic acid)</li> <li>• Polyhexamethylene biguanide (PHMB)</li> <li>• Environmental adjustments (e.g., kitty litter, coffee grinds, essential oils)</li> </ul>

<p><b>Pain</b> (multifactorial)</p>	<ul style="list-style-type: none"> <li>• Definition of the etiology (e.g., nociceptive, neuropathic, psychological, spiritual)</li> <li>• Appropriate systemic control (e.g., premedicating prior to dressing changes)</li> <li>• Assessing for infection and treating infection if appropriate</li> <li>• Nonadherent dressings</li> <li>• Dressings that minimize frequency of dressing changes</li> <li>• Topical analgesics</li> <li>• Amorphous gels</li> <li>• Nonpharmacological techniques (e.g., distraction)</li> </ul>
<p><b>Pruritus</b> (from skin stretching)</p>	<ul style="list-style-type: none"> <li>• Periwound moisturizers for nearby skin</li> <li>• Cool compresses</li> <li>• Hydrogel sheets</li> </ul>
<p><b>Exudate</b> (from devitalized tissue, increased permeability from the tumor, blood vessel disorganization, ongoing inflammatory process)</p>	<ul style="list-style-type: none"> <li>• Assessment for infection</li> <li>• Silicone adhesive</li> <li>• Alginates or hydrofibers</li> <li>• Foams</li> <li>• Diapers (infant or adult, depending on size needed)</li> <li>• Superabsorbent dressings (e.g., polymeric membrane dressings)</li> <li>• Pouches or drainage bags</li> <li>• Avoiding tape to secure dressings (Consider tubular bandage or clothing to secure.)</li> <li>• Protecting periwound from maceration</li> <li>• Note: Try to avoid overly bulky dressings. Remember the psychosocial impact.</li> </ul>
<p><b>Superficial infection</b> (from devitalized tissue, increase of bacterial growth, compromised immune system)</p>	<ul style="list-style-type: none"> <li>• Metronidazole</li> <li>• Silver impregnated dressings</li> <li>• Honey dressings</li> <li>• Antiseptic agents</li> <li>• Iodine-based dressings</li> <li>• PHMB</li> </ul>

**REFERENCES**

1. Tilley CP, Fu MR, Van Cleeve J, Crocilla BL, & Comfort CP. Symptoms of malignant fungating wounds and functional performance among patients with advanced cancer: an integrative review from 2000 to 2019. *Journal of Palliative Medicine*. 2020;23(6):848-62. doi: 10.1089/jpm.2019.0617.
2. Grocott P, Gethin G, & Probst S. Malignant wound management in advanced illness: new insights. *Current Opinion in Supportive and Palliative Care*. 2013;7(1):101- 5. doi: 10.1097/SPC.0b013e32835c0482.
3. Tilley C, Lipson J, & Ramos M. Palliative wound care for malignant fungating wounds: holistic considerations at end-of-life. *Nursing Clinics of North America*. 2016;51(3):513-31. doi: 10.12968/bjcn.2019.24.Sup9.S19.
4. Cornish L. Holistic management of malignant wounds in palliative patients. *British Journal of Community Nursing*. 2019;24(Suppl. 9):S19-23. doi: 10.12968/bjcn.2019.24.Sup9.S19.
5. Tandler S, & Stephen-Haynes J. Fungating wounds: management and treatment options. *British Journal of Nursing*. 2017;26(12 Suppl.):S6-14. doi: 10.12968/bjon.2017.26.12.S6.
6. Lo S-F, Hayter M, Hu W-Y, Tai C-Y, Hsu M-Y, & Li Y-F. Symptom burden and quality of life in patients with malignant fungating wounds. *Journal of Advanced Nursing*. 2012;68(6):1312-21. doi: 10.1111/j.1365-2648.2011.05839.x.
7. Young T. Caring for patients with malignant and end-of-life wounds. *Wounds*. 2017;13(5):20-9. Available at: <https://www.wounds-uk.com/journals/issue/52/article-details/caring-for-patients-with-malignant-and-end-of-life-wounds>. Accessed May 21, 2021.
8. Robinson P & Holloway S. Psychological factors associated with malignant fungating breast wounds. *Journal of the European Wound Management Association*. 2019;20(2), 19-22. Available at: [https://ewma.org/fileadmin/user\\_upload/EWMA.org/EWMA\\_Journal/Articles\\_latest\\_issue/October\\_2019/Robinson\\_10.35279\\_jewma201910.02.pdf](https://ewma.org/fileadmin/user_upload/EWMA.org/EWMA_Journal/Articles_latest_issue/October_2019/Robinson_10.35279_jewma201910.02.pdf). Accessed June 15, 2021.
9. Gibson S & Green J. Review of patients' experiences with fungating wounds and associated quality of life. *Journal of Wound Care*. 2013;22(5):265-72. doi: 10.12968/jowc.2013.22.5.265.
10. Reynolds H & Gethin G. The psychological effects of malignant fungating wounds. *EWMA Journal*. 2015;15(2):2932. Available at: [https://ewma.org/fileadmin/user\\_upload/EWMA.org/EWMA\\_Journal/articles\\_previous\\_issues/The\\_Psychological\\_Effects.pdf](https://ewma.org/fileadmin/user_upload/EWMA.org/EWMA_Journal/articles_previous_issues/The_Psychological_Effects.pdf). Accessed June 23, 2021.

11. Piggitt C & Jones V. Malignant fungating wounds: an analysis of the lived experience. *Journal of Wound Care*. 2009;18(2):57-64. doi: 10.12968/jowc.2009.18.2.38744.
12. Brinker J, Protus BM, & Kimbrel JM. *Wound Care at End of Life: A Guide for Hospice Professionals* (2nd ed.). Montgomery, AL: Optum Hospice Pharmacy Services; 2018.
13. Woo K. Hopes for palliative wounds. *International Journal of Palliative Nursing*. 2017;23(6):264-8. doi: 10.12968/ijpn.2017.23.6.264.
14. Alexander S. Malignant fungating wounds: epidemiology, aetiology, presentation, and assessment. *Journal of Wound Care*. 2009;18(7):273-80. doi: 10.12968/jowc.2009.18.7.43110. Available at: [https://ewma.org/fileadmin/user\\_upload/EWMA.org/EWMA\\_Journal/articles\\_previous\\_issues/The\\_Psychological\\_Effects.pdf](https://ewma.org/fileadmin/user_upload/EWMA.org/EWMA_Journal/articles_previous_issues/The_Psychological_Effects.pdf). Accessed June 20, 2021.
15. Villela-Castro DL, Santos V, & Woo K. Polyhexanide versus metronidazole for odor management in malignant (fungating) wounds: a double-blinded, randomized, clinical trial. *Journal of Wound, Ostomy, and Continence*. 2018;45(5):413-8. doi: 10.1097/WON.0000000000000460.