



The Experience of using Negative Pressure Wound Therapy with Multi-Layer Soft Silicone Foam as a Drape in Breast Cancer Exudate Management

Minlada Soimuk RN, ETN
Prapai Ariyaprayoon APN,RN,ETN
Ostomy and Wound Clinic, Ramathibodi Hospital

Introduction

Goal of care in terminal stage cancer is retaining patient to longest survive with the lesions. The patient had terminal stage of breast cancer with large cancer lesions, invade skin and internal organs especially lungs, caused patient suffered from pain every movement. In addition, there were highly exudates leaked from smelly wound. The patient felt uncomfortable due to skin was extremely wet repeatedly, and occurred maceration finally. Furthermore, dressing need to be changed frequently due to secondary dressing, gauze reached maximum absorption including bad odor. Every time to remove a dressing, patient had to suffering a painful, faced with bleeding risk from cancer lesions. After dressing was removed, wound was irrigated with saline then covered wound bed with wound contact layer before place the gauze to prevent gauze stick to the wound. In the early stages of wound care, it was imperative to daily dressing change until the wound was deep penetrated until shown as cavity, her lung can be seen by naked eye which is extremely serious. Nevertheless, the patient would like to fight for live because she worried about her 5-years-old child. She willing to get a treatment as long as she can survive to saw her child.



Figure 1 : A. show progression of breast cancer

Method

After that, we discussed with the oncologist, surgeons and patient's family to came out with the plan for palliative care. We concerned about complications from her severe wound, thus we persuaded her to admitted to a hospital for special treatment and closely monitoring. The goals of care are to make the patient feel more comfortable, reduce dressing change, skin complications, pain, and prevent bleeding. Therefore, negative pressure wound therapy was chose for treatment. However, there was limitation, we could not insert foam dressing into the wound cavity because the dressing may stick inside, unable to removed, and could not insert the catheter into wound cavity directly. The suction could harm tissues and internal organs. We applied the technique, periodically wrap gauze in order to prevent sucking the wound (as in the Figure2). Then closed with transparent film. We found that, It was difficult to sealed the wound completely from the chest to the axillary area due to it is easy wrinkle and lead to leakage.

At the same time, when peeled, the film stick to the patient skin result in more pain and trauma to the patient. Finally, we changed the transparent film to a multilayer foam with border



Figure 2 : A. show Suction cord , periodically wrap gauze to prevent sucking the wound
B. show supplies for Negative wound pressure therapy

Result

After we changed the transparent film to a multilayer foam with border instead, which able to covered wound completely, suck out large amount of exudates, skin surrounding the wound was dried and cleaned. The foam also able to absorb excessive exudate. The dressing can be changed every 3 days. Patient had a fresh face, more comfortable, and more comfortable movement. Patient also did not worried about dressing change because of peeling the foam that covered the wound was easily. It reduced pain when dressing change.

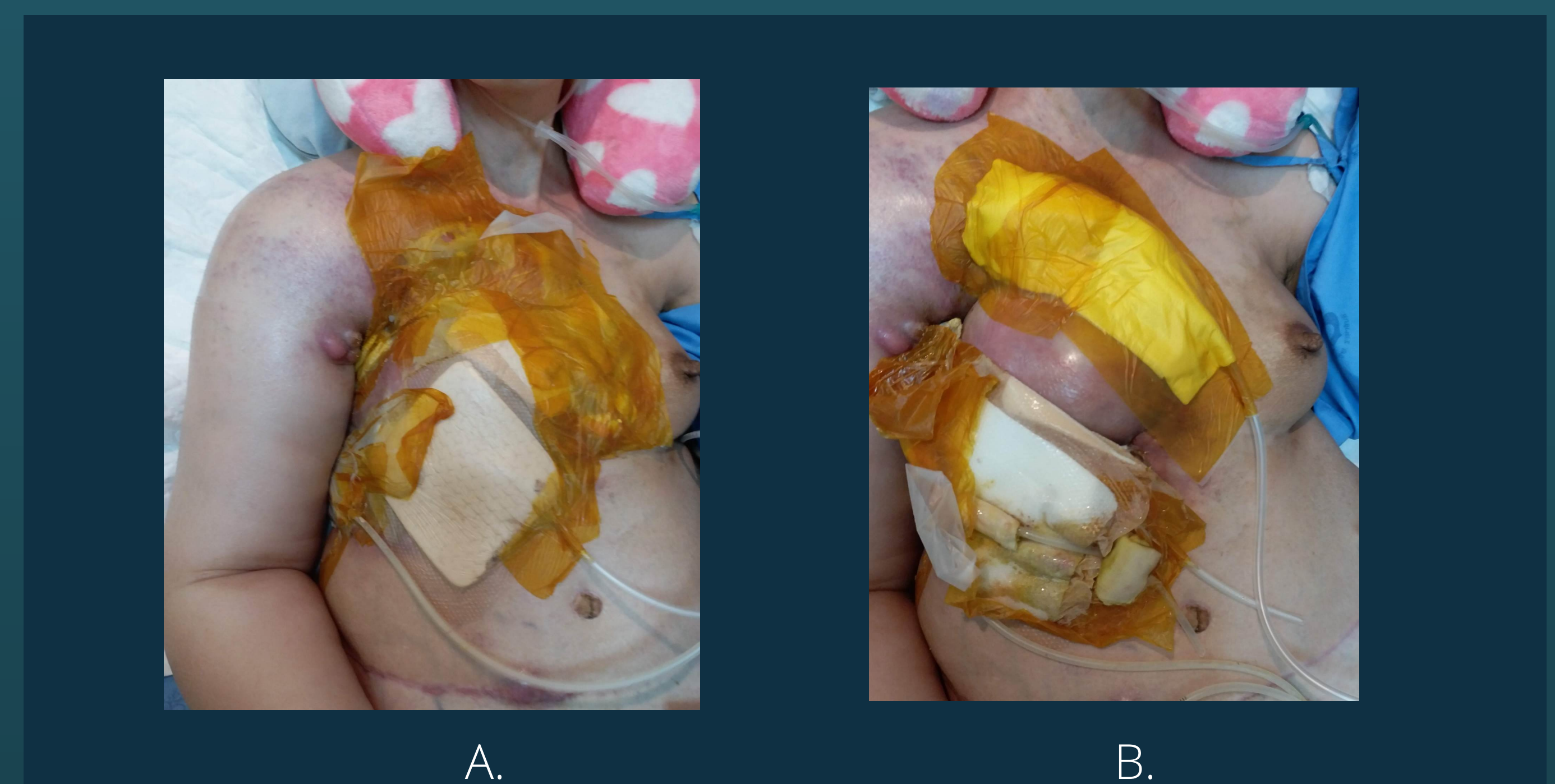


Figure 3 : A. After use multilayer soft silicone foam as drape
B. Result of Negative wound pressure therapy with multilayer soft silicone foam as drape

Conclusion

In conclusion, The proper dressing change is critical important. The team closely cared this patient until the end of her life. Patient passed away peacefully. However, cancerous lesions treatment that did not look like normal lesions. Wound was so difficult to heal. The objective of care was how to maintained wound in a state that the patient could survive with lesion. It was the duty of the nurse to care the patient holistically.

Reference

- Alkushi, A., Arabi, H., Al-Riyees, L., Aldakheel, A. M., Al Zarah, R., Alhussein, F., ... & Omair, A. (2021). Phyllodes tumor of the breast clinical experience and outcomes: A retrospective cohort tertiary hospital experience. *Annals of diagnostic pathology*, 51, 151702.
- Fernández, L. G., Matthews, M. R., Benton, C., Buresch, R., Sutherland, A., Tillison, N., & Brooks, J. (2020). Use of a novel silicone acrylic drape with negative pressure wound therapy in anatomically challenging wounds. *International Wound Journal*, 17(6), 1829-1834.
- Rasko, Y. M., Cai, S. S., & Diaconu, S. C. (2018). Use of Negative-Pressure Wound Therapy on Malignant Wounds. In *Pressure Injury, Diabetes and Negative Pressure Wound Therapy* (pp. 303-308). Springer, Cham.