

Management of Necrotizing Fasciitis with Advance Wound Product and Negative Pressure Wound Therapy

Nipaporn Norasarn

Yupin Chuapan

ET Nurse Tem, Surgical Ward 3, Nakornphanom Hospital

Background

Necrotizing fasciitis is a severe bacterial infection of the skin, from the epidermis, dermis, subcutaneous fat layer to the muscular layer. It causes tissue gangrene in the affected area and can spread to other parts of the body. It can become severely severed and eventually die. Early treatment requires cutting the infected part to reduce the number of bacteria and the chance of infection. After that heals the wound surface to create new tissue. The method of using Advance Wound Product in conjunction with Negative Pressure Wound Therapy is an alternative treatment for the wound surface that eliminates Biofilm and Slough to prevent re-infection then control the wound surface to have an appropriate moisture balance that affects wound healing.

Material&Methods

63-years old Thai female patient had a wound on the right foot, high fever, right foot swelling with redness, blistering, foul-smelling wound, pus-filled right foot, instep black wound. The doctor performed an OR to remove dead tissue from the wound site. (debridement) then the wound healing is divided into 3 steps as follows:

1. Wet-to-dry dressings: Using saline to wash the wound, then apply a grease moistened Prontosan solution to the wound for 15 minutes and then apply Prontosan GelX on the wound, cover the wound gauze every day for 10 days to prepare eliminating Biofilm and Slough.
2. Negative Pressure Wound Therapy: Apply Prontosan solution to the wound for 10 minutes, then use Vacuum Assisted Closure to reduce the amount of Exudate and increase the growth of blood vessels to feed the wound, causing Granulation Tissue to increase the rate of growth and perform Negative Pressure Wound Therapy for 18 days.
3. Advance Wound dressings: Apply Prontosan solution to the wound for 10 minutes and cover with Askina Transorbent every 3 days for 1 week. Then use Askina Dressil every 3 days for 1 week. The patient can continue to take care of the wound for another 2 weeks until the wound is completely healed.

Results



Conclusion

Using Advance Wound Product with Negative Pressure Wound Therapy which eliminates Biofilm and Slough to prevent re-infection. It can control the wound surface to have an appropriate moisture balance, allowing the wound to heal as quickly as possible without organ damage.

Reference

1. Creech CB. Myositis, pyomyositis, and necrotizing fasciitis. In: Long SS, Prober CG, Fischer M, editors. Principles and practice of pediatric infectious diseases. 5th ed. Philadelphia, PA: Elsevier; 2018. p. 2318-50
2. กมลวรรณ เจนวณิช. Negative Pressure Wound Therapy (NPWT). Srinagarind Med J 2013