



โรงพยาบาลขอนแก่น  
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# Wound Bed Preparation with Advance Wound Care

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## Background

Wound bed preparation increases the efficiency of wound healing. It is holistic, patient-centered care and the involvement of caregivers in the care of treatable wounds. It must have a sufficient blood supply and the cause of the wound is clearly identified.

The wound has proper moisture. Wound dressing and control of localized infection or wound inflammation In the treatment of non-healing wounds, we are changing patient care goals by focusing on enabling patients to live comfortably with their wounds by relieving pain, controlling odor, Preventing infection by reducing bacteria on the wound surface, dressing the decayed tissue, keeping the wound properly moist and keeping it free of pus. Preparation of the wound surface consists of Debridement and foreign matter from the wound.

Controlling biofilm-forming bacteria on wounds impedes wound healing. give the appropriate antibiotic Wound with proper moisture will heal faster. The secretions should be with wound dressings that can absorb the secretions well or change the wound more often. Remove dry, hard or necrotic wound edges using Advance Wound Product to remove Biofilm and Slough in combination with Negative Pressure Wound Therapy to increase the blood supply to the wound and create more collagen while promoting better wound healing.<sup>1</sup>

## Material & Methods

A 58-year-old Thai male patient with symptoms 2 days before coming to the hospital with pain in his left leg. Relatives bring herbal compresses and massages. 1 day later, the left leg was more swollen and gradually spread to the left thigh. Dx: Necrotizing fasciitis Lf. leg with Ischemic limb with Septic shock with AKI with Respiratory failure with R/O Rhabdomyolysis No U/D performed High Lf. leg. Above Knee Amputation There are procedures for preparing the wound surface and treating the wound as follows: 1. Surgery High Lf. leg Above Knee Amputation with Debridement 1st time to remove necrosis 2. Revision Amputation Stump Lf. AKA C 3. Debridement 3 times with Wet-to-dry dressings using saline to wash the wound.

A saline-soaked gauze was then applied to the wound, wound twice daily to maintain adequate hydration for a period of 14 days.

4. Wet-to-dry dressing using saline to wash the wound, then apply Prontosan solution gauze to the wound surface for 15 minutes and remove it for 10 days to prepare the wound surface to remove Biofilm and Slough. 5. Perform Negative Pressure Wound Therapy to help the wound stay moist at the appropriate level because under atmospheric pressure reduces wound secretions, tissues and interstitial space.

Tissue swelling is reduced by sub-atmospheric pressure, making the edges of the wound smaller. and shallow wounds resulting in smaller wound size which change every 3 days, 9 times for a period of 28 days until discharge from the hospital.

## Results



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## Conclusion

Advance Wound Product can aid in wound preparation, prevent re-infection and perform Negative Pressure Wound Therapy to control wounds to maintain optimum moisture, increase blood supply, increase collagen production and promote wound healing.

## Reference

1. Harries RL, Bosanquet DC, Harding KG. Wound bed preparation: TIME for an update. *Int Wound J* 2016; 13 (suppl. S3):8–14.
2. Purcell A, Buckley T, King J, Moyle W, Marshall A. Topical analgesic and local anesthetic agents for pain associated with chronic leg ulcers: a systematic review. *Adv Skin Wound Care* 2020; 33(5):240-51.
3. Sibbald RG, Elliott JA, Persaud-Jaimangal R, Goodman L, Armstrong DG, Harley C. et al. Wound Bed Preparation 2021. *ADV SKIN WOUND CARE* 2021;34:183–95.