

Effect of Polyhexanide to Wound Bed Preparation in Leg Ulcer

Gulradar Sivasarit¹, Benjawan Worawitnoppakul¹, Tipyanee Thinwilai¹, Rattana Pianchareonsin²

¹RN Vascular Wound Care Nurse Team, ²APN, Nursing Department Siriraj Hospital, Siriraj Vascular Center

Introduction: Adequate wound bed preparation is very important for wound healing, and includes of controlling exudate and edema, decreasing the bacterial burden, promoting granulation tissue, and removing necrotic tissue⁽¹⁻³⁾. We use the modified wound bed score (modified WBS) to evaluate outcome of wound bed preparation. The study show that modified WBS system can predict closure in wounds treatment⁽⁴⁾. From our 2 cases study, polyhexanide substance were affected to modified WBS. We summarized that, polyhexanide can increase the modified WBS scores and reduce wound healing process.

Result: Case 1: Thai female, 77 years old, present with chronic venous ulcer both leg for 5 years. Duplex ultrasound wasn't found neither deep vein thrombosis nor great saphenous vein reflux. Physical examination was found frozen ankle about 10 degree of rotation. Case 2: Thai female, 69 years old, present with non-healing ulcer from bilateral femoropopliteal arterial occlusion S/P angioplasty at Lt. SFA, PA, TP trunk and PER. After using polyhexanide solution, the slough was decreased, and ulcer area was reduced rapidly. The ulcer can complete healing about 7 months after diagnosis. Both modified WBS scores and improved ulcers have shown in table 1.

Conclusion: Polyhexanide can increases WBS that correlation with wound healing which can be used both Acute and Chronic wounds. It can reduce the formation of slough tissue, that is an obstacle to wound healing and patients will not suffering from debridement pain. Patients or caregivers can take care of theirs wound by themselves, reduced cost of traveling to hospital and increase quality of life.