

# Disruptive Diabetic Foot Ulcer

## A Complexity and Dynamic Process of Wound Management

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### Background

A diabetic foot ulcer is an open sore or wound that occurs in approximately 15% of patients with diabetes and is commonly located on the bottom of the foot 6% will be hospitalized due to infection or other ulcer-related complication. One-third of ulcers never heal with amputation, 45.7% achieved ulcer healing, 36.2% underwent amputations, 9.5% died before ulcer healing and 8.5% were lost to follow-up. Three domain factors affect healing process are Control comorbidity, Improve nutrition and Local wound care. The causes of delay in healing will not only vary between people but also vary with time: different factors may be dominant in delaying healing at different stages in the healing process. This study focus only local wound care technique to selecting an appropriate wound management strategy.

A 61 years old with Chronic Diabetic Foot Ulcer right foot last 3 years amputated right 5<sup>th</sup> toes closed wound. Three months ago emerge DFU both instep and sole of foot after 3 months of conventional dressing cannot control infection and inflammation so disruptive innovation in wound care emerge from Wound Care Team to enhance moist wound healing environment, balance workload and cost effectiveness.

### Methods

Applied 3 steps of advance wound care technique (a) Wound base preparation "TIME framework" (b) Wound cleanser normal saline only (c) Wound dressing selection.

**Tissue:**60%dark brown 30%yellow slough 10% granulation, **Infection/ Inflammation:** edema to the wound bed and periwound, purulent exudate, **Moisture balance:** heavy exudate, **Edge of wound:** swelling, maceration. First, sharp debridement and pack silver sulfadiazine cover with gauze twice a day for 14 days then prontosan gel X for autolytic debridement and biofilm management control infection and inflammation after 35 days improve wound base 60% granulation and 40% yellow slough and exposed tendon later applied Negative Pressure Wound Therapy (NPWT) for 26 days.

### Results

After 61 days completed 100% granulation no infection/ inflammation mild exudate well define edge of wound.

### Conclusions

Wound base preparation, wound cleanser and wound dressing selection are three factors that mix and match in disruptive era on wound care to ensuring access to quality care improve function and cost-effectiveness.

### Reference

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