

Case Study: Hydrofiber Dressing for Promote Wound Healing of Diabetic Foot Ulcer

*Piraluk Laplai, RN., M.N.S. (Adult Nursing), ATCN., ET-Nurse
Phra Nakhon Si Ayutthaya Hospital*

Abstract

Introduction: Diabetic foot ulcer (DFU) is one of the most serious diabetic complications. The standard treatment for DFU is building on these principles, the pillars of treatment today include the following; local wound care with surgical debridement, dressings promoting a moist wound environment, vascular assessment, treatment of active infection, and glycemic control. This case study demonstrated that the using of hydrofiber (AQUACEL™ Ag + Extra™) dressing is helpful in promote wound healing and stabilizing the expose bone in DFU.

Purpose: The study of effectiveness in hydrofiber dressing for promote wound healing of DFU.

Case Study: This 48 year – old diabetic man who has the medical problem of type II DM, and Hypertension. He has left foot erythema, swelling, and local heat for several weeks with gangrene change of left big toe. He came to our OPD for help on 23 Oct 2019. Lab data showed leukocytosis (WBC: 15,800/ul). We then arranged admission for surgical debridement and antibiotics.

Intervention: The wound size after left big toe amputation and debridement was 6.0x4.5x2.0 cms. Left big toe bone exposure were noted. After several days of wet dressing by Silver Sulfadiazine and normal saline, the wound bed delayed healing and increasing yellow slough tissue typed. We would like apply BWAT scales in order to evaluate successfulness for DUF (BWAT score = 45). We then applied AQUACEL™ Ag+ Extra™ on the wound, the wound bed became clean. The patient was discharged under the stable condition. We then applied AQUACEL™ Ag+ Extra™ on the wound in outpatient department.

Outcome: The granulation tissue grew gradually and the exudates of wound decreased after we used AQUACEL™ Ag+ Extra™ as wound dressing (BWAT score = 45). We started from changing dressing once a day. Twice a week later, the tendon and bone exposure area decrease and the wound size became smaller (BWAT score = 33). We then changed dressing once every 3 days. The wound complete healed after 2 months. We conclude AQUACEL™ Ag+ Extra™ is a good solution for DFU.

Reference:

1. Lawrence A.L., Kathryn E.D., Sandra J.B, Liza B., Adam N., Paul J.K., et., al. WHS guidelines update: Diabetic foot ulcer treatment guidelines. *Wound Healing Society*. 2016;24(1);112-26
2. Gwendolyn Cazander, Bianca K. Ottelander, Sandra Kamga, Martijn C.H.A. Doomen, Tim H.C. Damen, Anne Marie E. Well, Importance of Debriding and Wound Cleansing Agents in Wound Healing, Therapeutic Dressings and Wound Healing Applications, 10.1002/9781119433316, (59-89), (2020).