Roles of Advanced Bioactive Wound Dressings in **Treating Diabetic Foot Ulcers**

Soheila S. Kordestani ^{1,2}, Farzaneh NavebHabib ², Mitra S. Abyaneh ²

- 1. Department of Medical Engineering, Amir Kabir University of Technology, Tehran, Iran
- 2. Chito Tech Company, Iran

Corresponding Author: Soheila Salahshour Kordestani, E-mail: ss.kordestani@chitotech.com

ABSTRACT

Background: The Aim of this study was to investigate effectiveness of bioactive Wound dressing for treating Diabetic Foot Ulcers (DFU)

Material and Methods: 30 DFUs were selected to receive the bioactive wound dressings (n=30 wounds). Wound healing process was recorded at the beginning of each dressing change. None of 30 Patients dropped out of the study. The rate of wound healing and effectiveness of the dressings were evaluated

Results: The study demonstrated that the use of advanced bioactive wound dressings increased the rate of healing, reduced the length of hospital stay, eliminated the need for surgical debridement and as a result there were fewer amputations.

Conclusion: The study confirmed the value of advanced bioactive wound dressings. physician's satisfaction and patient's comfort were significantly increased the healing rate. This will in turn improve the quality of life of these patients and bring significant cost saving for health care system.

Keywords: Diabetic Foot, Wound Healing, Advanced Bioactive Dressing