

Natural Herbs for the Treatment of Skin Ulcers in Diabetic Animal Models

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Chronic skin ulcers resulting from pressure ulcers or diabetes, affect nearly 2 million people each year and account for an annual healthcare costs of about \$50 billion. Skin ulcers are commonly associated with elderly, bedridden, and debilitated patients, spinal cord injury and patients undergoing major orthopedic surgery. Diabetes increases the risk of skin ulcers because of its association with nerve damage (neuropathy), poor circulation and infection. Current treatment of skin ulcers includes traditional wound dressings, antibiotics, and debridement to remove necrotic tissues. One major disadvantage of using excessive antibiotics in skin ulcer treatment is antibiotics resistance. Herbal antimicrobials are expected to be non-cytotoxic, antibacterial, anti-inflammatory effect and will promote skin ulcer healing. Our aim in this study is to investigate various formulas of natural herbs e.g. Curcumin, and Ginsengs to enhance skin ulcer healing in animal models of skin ulcers. Our preliminary data show promising results in skin healing improvement both in Diabetic and Non diabetic pressure ulcer models. Ongoing work is verifying the healing and antibacterial potential of such formulas.

Biography:

Diana Sami is currently a graduate student in the Biotechnology program at the American University in Cairo (AUC). She earned her Bachelor degree in pharmaceutical Science from faculty of pharmacy, Helwan University, Egypt in 2011. She then obtained a Diploma in healthcare and hospital management from the American University in Cairo (AUC) in 2014. At present, Diana is interested in the development of cost effective treatment for skin ulcers using natural herbs.