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A Comparative Study between Chitosan and Povidone Iodine as Dressing Solution for Chronic Wounds

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Abstract

Objective : To compare the effectiveness of chitosan with povidone iodine as a dressing material in diabetic foot and venous ulcers.**Material and methods :** Forty patients with diabetic foot ulcers and venous ulcers were randomized into 2 groups : group (A) chitosan based dressing (n=20 patients) and group (B) (n=20 patients) with povidone iodine solution 10% based dressing followed by normal saline as a control group . **Results :** In group (A), the mean daration of wound healing was 75 days (range45 – 90 days). In group (B) , the mean duration of wound healing was 100 days (range 75 – 120 days) P<0.05.

Conclusion : in this study,we found that in chitosan based dressings, the wound healing was faster than with povidone iodine dressings resliting in a shorter hospital stay and lower cost comparison to povidone iodine dressing.

Key words: Chitosan –Chronic wounds, povidone iodine dressings,ulcers, venous stasis , wound healing