Contact burn healing: Skin regeneration*

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Abstract

Contact burns may result in severe burn injury due to prolonged transfer of heat from an object to the skin. Severity of burn injury is related to the rate at which heat is transferred from the heating agent to the skin. This case had contact burn at Rt. heel of burn resulting from motorcycle exhaust pipe. Intervention procedures were mentioned by applying collagen gel, which encourage the deposition and organization of newly formed collagen fibers and granulation, then covering with Soft Silicone dressing with silver offers in wound at high risk of infection and manage exudates. About 3 months after starting wound care. The contact burn injury was covered with epithelium and continued using collagen lotion until the wound healed.

Key word: Contact burn, Soft Silicone dressing with silver, Collagen gel

Introduction

Contact burns may result in severe burn injury due to prolonged transfer of heat from an object to the skin. Severity of burn injury is related to the rate at which heat is transferred from the heating agent to the skin[1]. It tends to cause full thickness burns. The most important first action is to stop the burning process. The source of the burn should promptly be removed and treat the wound according to a severity of burn injury[2].

In case has contact burn at heel that's thick epidermis layers, there is a risk of injury, of hurting deeper skin layers as well as of an infection developing. The treatment will therefore have

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to be about helping the wound healing and reducing the thick skin surrounding it. Not so easy, due to the skin around the rim of the heel being especially thick.

Case Report

A 43 years old Thai male. He had contact burn at right heel of burn resulting from motorcycle exhaust pipe, wound bed was covered with black necrotic tissue. Necrotic tissue was removed. The wound bed has not improved for a month. Enterostomal Therapy nurse was consulted to manage for wound healing. The goal of management was to treat infection, skin regeneration and comfortable.

Clinical Assessment

First assessment: Contact burn from motorcycle exhaust pipe at right Heel, a full thickness burn injury, size 6x4 cms, 50% granulation tissue and 50% fat of wound bed, callous at wound edge, mild serous exudates, pain score 2 point. (figure1)

Intervention

1. Cleansed with 0.9%NaCl and scrubbed at surrounding skin with skin cleanser.
2. Applied collagen gel, which encourage the deposition and organization of newly formed collagen fibers and granulation[3]. (figure2)
3. Covered with Soft Silicone dressing with silver offers in wound at high risk of infection and manage exudate. (figure3)
4. Emphasized using collagen lotion at the wound edge until the wound healed. (figure4)

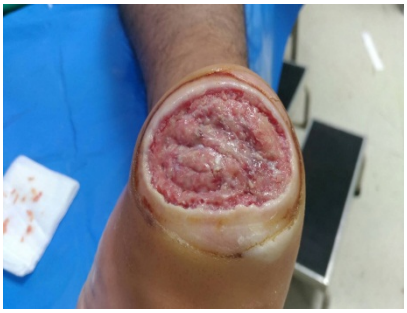


Figure 1

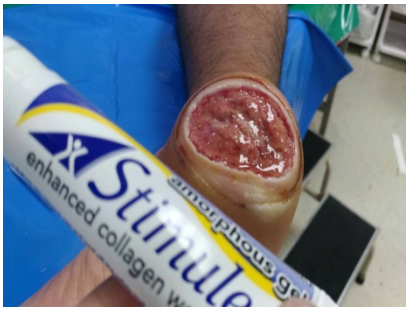


Figure 2

Figure 3

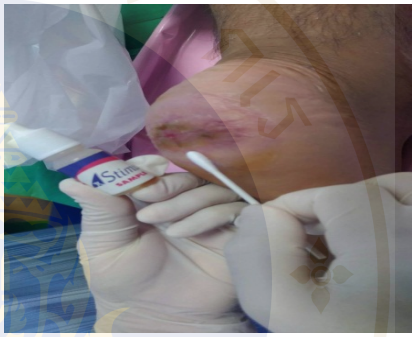
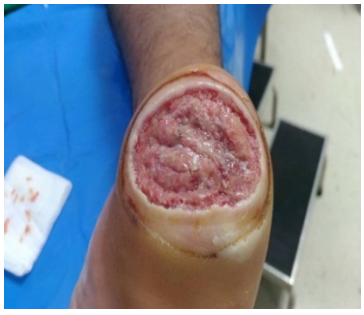


Figure 4

Result

About 3 months after starting wound care. The contact burn injury was covered with epithelium.



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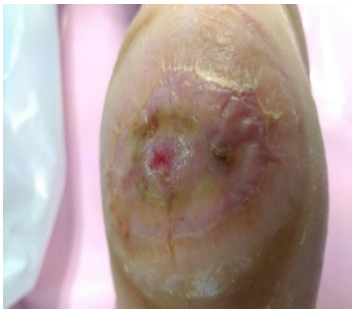

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Conclusion

The use of dressing with collagen gel and Soft Silicone dressing with silver should be considered in contact wound to promote healing, control infection, reduce pain and skin regeneration.

Reference

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