

Superoxidised Solution as a Cleansing Solution for Diabetic Foot Ulcers

Harikrishna K.R.Nair MD FMSWCP, K Vijayakumar AMO, MMA Intan Syuhada SRN
Wound Care Unit, Dept. Of Internal Medicine, Kuala Lumpur Hospital

Superoxidised Solution has been advocated for cleansing wounds in Wound Bed Preparation. 10 cases of diabetic foot ulcers were chosen and assessed. Superoxidised Solution was used to clean the wound and the pack was soaked for 15 minutes and then desloughing was done in some cases and dressings were applied. This study is to ascertain if the Superoxidised Solution is efficacious as a cleansing solution in wound management. The end points were in terms of odour management and bacterial burden as well as pain management.

INTRODUCTION:

Superoxidised Solution is used in the management as a wound cleansing agent. It is used for the wound cleansing, debriding, irrigation and moistening on acute and chronic wounds. It also removes the fetid odour, reduce microbial load and enhance wound healing.

METHODOLOGY:

10 cases of diabetic foot ulcers were chosen and assessed. Superoxidised Solution was used to clean the wound and the pack was soaked for 15 minutes and then desloughing was done in some cases and dressings were applied.



Case 1: 48-year old Malay gentleman with chronic right diabetic foot ulcer seen in the wound care clinic on 19.7.2013. On assessment there was thick slough more than 25%, strong odour and heavy exudate. Electro Activated Superoxidised solution was used for wound cleansing. In week 8, the slough, odour and exudates were tremendously reduced and the wound is healing well.



Case 2: 49-year old Indian Gentleman with a diabetic foot ulcer on the right hallux. On assessment, there was necrotic tissue with slough, heavy exudates and strong odour on the wound. Patients also complained of pain. Superoxidised Solution was used for wound cleansing on the 1.7.2013 and packed with modern dressing. In week 2, it was noted that the necrotic tissue has been removed, sloughs and exudates were reduced. In week 7, the uniform granulation was noted.



Case 3: 48-year old Malay gentlemen with Left Diabetic Foot Ulcer at the dorsal aspect since May 2013. On first wound assessment, mild yellowish exudate with biofilm noted. Wound was cleansed with Superoxidised Solution since 23.7.2013. Biofilm has been removed by debridement and in week 8 the wound has healed.



Case 4: 56-year old Malay lady with Right Diabetic Foot Ulcer of the plantar aspect of the forefoot since May 2013. First seen in the Wound Care Clinic on the 3rd of June 2013. On assessment the wound was sloughy, there was a strong odour and patient complained of pain. Superoxidised Solution has been used for wound cleansing since 19.7.2013. On week 6, the wound was healing well with reduction in size. There was no odour and the exudate level was minimal.



Case 5: 64-year old Malay gentlemen with ray amputation on the left 5th toe done on May 2013 but the wound was still dirty. On assessment moderate yellowish exudates slough >25% and mild biofilm has been noted. Started using Superoxidised Solution for wound cleansing. In 2 weeks there was no slough, odour and exudate level was minimal. The wound has been granulating well.



Case 6: 35-year old Indian lady with a Chronic Diabetic ulcer on the right foot since June 2013. Seen in woundcare clinic on 19.7.2013. On assessment there was slough >25%, strong odour and exudate. Started on Superoxidised Solution on 19.7.2013. In week 5, granulation noted and there was no odour. Slough and exudate were reduced.



Case 7: 53-year old Indian Gentlemen had a right foot ulcer at the dorsal aspect with charcot foot. On assessment on 13.6.2013 there was strong odour, heavy exudate and slough. Superoxidised Solution has been used to manage the wound. In 12 weeks, the wound was healing well with reduction in size. There was no odour and the exudate level was minimal.



Case 8: 71-year old Indian Gentlemen had a wound dehiscence on the abdominal wall at right lumbar region. On assessment the wound was sloughy, exuding and had strong odour. In 4 weeks the wound was healing well and the amount of slough and exudate were reduced. There was no odour.



Case 9: 52-year old Indian Gentlemen had a left leg Venous ulcer at the malleolus. On assessment on 25.7.2013, slough was >25% with moderate exudate and mild odour. Superoxidised Solution was used for cleansing. In 4 weeks uniform granulation was noted and there was no odour and level of exudate and slough was minimal.



Case 10: 64-year old Indian Lady with left leg Venous Ulcer at the malleolus. On assessment on 23.7.2013, there was mild exudate, slough >25% and patient complained of mild pain. Superoxidised was used for wound cleansing. Modern dressing was used with secondary dressing. In week 5, the wound was healing well with reduction in size. There was no pain and the exudate level was minimal.

RESULTS:

All ten cases had reduction of smell and there was improvement in terms of infection and the wounds started to heal well in concordance with Wound Bed Preparation. The patients also didn't feel any pain during the dressing change.

CONCLUSION:

The Superoxidised Solution is a good cleansing agent to be used in the management of diabetic foot ulcers.

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