A Preliminary Use of Hydrofiber with Ionic Silver Dressing in the Early Management of Superficial Partial Burns

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Introduction

Paediatric patients in KK Women's and Children's Hospital, Singapore, who suffers from burns mostly present to the children's emergency with injury ranging from second-degree superficial partial-thickness to deep partial-thickness. The skin of superficial partial-thickness burn is described as erythematic and "weepy" with blister formation, hypersensitive and painful to touch. As such, dressings to reduce procedural distress with minimum dressing changes should be considered as an integral part of treatment management. Choice of dressing application should allow wound healing, eliminating the degree of movement difficulty and provide adequate exudate control especially in the child's little hands and feet.

Method

Pilot study on the use of hydrofiber with ionic silver dressing on burns wound was applied on 10 paediatric patients with superficial partial-thickness with TBSA <10% affecting various part of the body especially hands. The dressing was kept on until the burn skin underneath was completely healed, where it begins to detach without risk of re-trauma to the wound bed. External dressing was changed every 3 days, where non-adherent dressing was trimmed and reapplied.

Results

Patients managed with hydrofiber with ionic silver dressing was noted to required no more than two to three dressing changes, hence decreasing procedure-related pain from dressing changes and reduction in wound care costs in relation to patient, nursing time and improved healing rates. Patients wound epithelised in less than two weeks period.

Conclusion

Hydrofiber Technology has a distinctive mechanism of action that rapidly absorb fluid holding it within the structure of the fibers while releasing silver[2], and provides a moist wound healing environment. This combination makes it possible to promote healing and tissue regeneration while minimizing space where bacteria can thrive, over an extended period without the need to change dressings[1]. Hydrofiber provides enhanced flexibility and mobility, minimal shrinkage, facilitate ease of removal to ensure that wound heals properly and prevent contracture that can limit range of motion. It is with these benefits for burn wound dressing that ensures rapid wound healing, pain control, return of full function to the injured area, with good aesthetic results.

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References

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