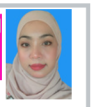
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THE EFFICACY OF USING BURN OINTMENT(MEBO) IN TREATING PEDIATRIC BURN WOUNDS: A CASE STUDY

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INTRODUCTION

Burn injuries are a common occurrence in young children, often resulting from household accidents such as scalds from hot liquids. Pediatric burn wounds require specialized care due to children's unique physiological characteristics, including thinner skin layers and heightened susceptibility to infections and scarring. Traditional treatments, such as silver sulfadiazine and regular dressing changes, can cause discomfort, prolonged healing times and emotional distress in young patients.

Moist Exposed Burn Ointment (MEBO), a natural burn ointment designed to facilitate moist wound healing, has gained popularity as a less invasive and potentially more effective alternative. MEBO is known for promoting faster re-epithelialization ,reducing pain and minimizing scarring by maintaining an optimal healing environment. This case study explores the efficacy of MEBO in treating a pediatric patient with second- degree burns, focusing on healing time, pain management and overall recovery.

MATERIALS & METHODS

A 2-years old child was brought by his parents to the Emergency Department (ED) ,KMI Kuantan Medical Centre on 27 October 2023 with chief complaint of burn injuries on the left foot after accidentally spilling hot water. Upon examination,the burn wound are over the dorsal aspects of the left foot particulary covering the toes and upper foot. The burn was cleaned with sterile water before applying MEBO . No dressings were used, allowing the wound to remain exposed. Paracetamol was given as needed to manage pain. Healing progress was tracked over 2 weeks, focusing on skin re-epithelization and signs of infection



Figure 1 and 2 : baseline



Figure 3 and 4 : 1 weeks



Figure 5 and 6 : 2 weeks



Figure 7 and 8: 3 weeks

DISCUSSION

The use of Moist Exposed Burn Ointment (MEBO) in this case study demonstrated several advantages in the treatment of pediatric second-degree burns. The moist healing environment maintained by MEBO was key to the accelerated re-epithelization observed within 2 weeks. The rapid healing rate aligns with existing studies showing that MEBO can significantly reduce healing time in comparison to traditional treatments like silver sulfadiazine and dry gauze dressings.

One of the most notable outcomes in this case was the reduced pain and emotional distress experienced by the child. MEBO 's ability to keep the wound moist helped avoid painful dressing changes, which is often a source of anxiety for young patients. This is consistent with literature suggesting that MEBO not only promotes faster healing but also offers a more comfortable recovery process, especially for children. Regarding scarring, the child showed minimal scarring after re-epithelialization, a common benefit of moist wound healing. Traditional treatments often result in more significant scar formation due to the dry healing environment, which can lead to prolonged inflammation and tissue damage.

Another important observation was the lower risk of infection during treatment. MEBO's herbal components, including beta-sitosterol have demonstrated anti-inflammatory and antimicrobial properties which likely contributed to the absence of infection throughout the healing process. While MEBO proved effective in this case, more large-scale studies are needed to fully understand its potential in broader pediatric burn care settings. Factors such as long-term scarring outcomes and cost-effectiveness compared to the traditional methods should be further evaluated.

CONCLUSION

This case study demonstrates that Moist Exposed Burn Ointment (MEBO) is an effective treatment option for pediatric second- degree burns. The application of MEBO led to faster healing, with full re-epithelialization occurring within 2 weeks, reduced pain, fewer dressing changes and minimal scarring. These outcomes suggest that MEBO provides a child-friendly alternatives to traditional burn treatments, offering both physical and emotional benefits. MEBO's ability to maintain a moist wound environment while preventing infection and scarring positions it as a valuable tool in pediatric burn care. Future studies should further investigate its long-term effects and potential as a standard treatment for burns in children.

REFERENCES

1. Mabvuure, N.T. , Brewer, C.F. , Gervin, K. and Duffy, S.(2020). The use of moist exposed burn ointment (MEBO) for the treatment of burn wound : A systemic review.Journal of Plastic Surgery and Hand Surgery,54(6),pp.337-343.
2. Atiyeh, B.S., et al (2002). Benefit-cost analysis of moist exposed burn ointment. Burns,28(7),pp.659-663.
3. Valencia, S.E. and Cabantac, R.R.III (2020). Systematic review on Moist Exposed Burn Ointment (MEBO) versus conventional methods for management of partial- thickness burn wounds.
4. Carayanni, V.J., Tsati, E.G. and Spyropoulou, G.C., (2011) . Comparing oil-based ointment versus standard practice for the treatment of moderate burns : A trial- based cost- effectiveness evaluation. BMC Complementary and Alternatives Medicine, 11, p.122.