4th World Congress on
Pediatrics and Clinical Pediatrics
July 01, 2023 | Webinar

Received Date: 23-10-2022 | Accepted Date: 28-10-2022 | Published Date: 30-07-2023

Single-stage biosynthetic cellulose dressing (Epiprotect) versus nonadherent gauze dressing in pediatric burns

Priyanka Lalwani
Al Jalila Children Specialty Hospital, UAE

Introduction: Paediatric burn is a common emergency presentation with a variety of treatment options available. Major parental concerns include pain, healing and scarring, in addition to high parental anxiety. Epiprotect is a biosynthetic cellulose-based sheet, applied as a single-stage first-layer contact dressing following initial debridement.

Materials and Methods: A retrospective case-control comparison study was carried out in our hospital on 28 patients, 14 with biosynthetic cellulose, and 14 with non-adherent gauze. Pain and parental anxiety were measured by the parental perception of the child's pain on the Wong-Baker Faces pain rating scale and STAI-6 questionnaire (compatible with the STAI-S scoring system) respectively in the first clinic visit during outer dressing change. Scar score was calculated using the Vancouver scar scale (VSS).

Results: Patients in both groups had a similar demographic and clinical distribution of location, mechanism of burn, first aid, surface area and depth of the burn. Pain and parental anxiety were significantly reduced in the cellulose dressing group ($p = 0.0001$). The time to complete healing was similar in both groups. The mean VSS scar score was 4 (1–5) in the cellulose dressing group compared to 6 (4–11) in the non-adherent gauze group ($p = 0.0463$). Two patients developed hypertrophied scars in the non-adherent gauze group. The mean number of outpatient clinic visits in the cellulose dressing group was 2.5 (1–5) as compared to 3 (2–6) in the non-adherent gauze group ($p = 0.0607$).

Conclusion: Single-stage first-layer application of biosynthetic cellulose dressing is associated with reduced pain, parental anxiety, and improved scarring. The dressing is safe and can be applied to patients with superficial and mixed-depth burns.

Recent Publication

1. A. Bener, K.M. Al-Salman, et al. Injury mortality and morbidity among children in the United Arab Emirates.Eur J Epidemiol, 14 (2) (1998), pp. 175-178, 10.1023/a:1007444109260
2. Michal Grivna, Hani O. Eid, et al. Burns, 40 (3) (2014), pp. 500-505, 0.1016/j.burns.2013.08.010
3. Regan Medical UK- Part of Joint operations family, https://www.regenmedical.co.uk/epiprotect/.

Biography

Priyanka Lalwani is a dedicated and compassionate pediatric emergency specialist at the Al Jalila Children's Specialty Hospital in Dubai, United Arab Emirates. With years of experience and a passion for providing exceptional care to children, she plays a crucial role in diagnosing and treating pediatric emergencies. Priyanka's expertise and commitment to her field make her an invaluable asset to the hospital, ensuring that young patients receive the highest standard of medical attention. Her unwavering dedication to improving children's health and well-being has earned her recognition and respect among her peers and patients alike.

Priyanka.lalwani@ajch.ae