BIOBRANE FAILURE IN PARTIAL THICKNESS BURNS - A RETROSPECTIVE ANALYSIS (093)

*Brage Martin C.¹, Martínez Méndez J.¹, González Miranda ñ¹, Casado Pérez C.¹

¹Hospital Universitario La Paz, Burn Unit, Madrid, Spain

Introduction: Biobrane® is a biosynthetic skin substitute indicated for the treatment of superficial partial and mid-dermal partial thickness burns. Determining the depth of the burn is a clinical diagnosis in the majority of centres, despite its low sensitivity. The aim of this study is to identify factors related to the failure of Biobrane® when applied to clinically diagnosed partial thickness burns.

Methods: The medical records of 256 patients (age range: 14-89 years) treated with Biobrane® for partial thickness burns treated between September 2009 and December 2014 at the Burn Unit of La Paz University Hospital, Madrid, Spain were retrospectively analysed.

Results: Failure of treatment occurred in 42 patients (16%) and associated complications included underestimation of wound depth (54.7%), infection (31%), loss of adherence (11.9%) and haematomas (2.4%). Factors concomitant with Biobrane® failure consisted of electrical/chemical/contact burns (OR 14.40, p = .001), flame burns (OR 6.00, p = .004), mid-dermal partial thickness burns (OR 5.09, p < .001) and increasing total body surface area (TBSA).

Conclusion: The mechanism of the burn plays an important role in the outcome of clinically diagnosed partial thickness burns treated with Biobrane®. Those resulted by flame, electrical current, contact and chemicals have higher rates of failure as compared to those categorized as scalds.