A COMPARISON OF SEMI-OPEN DRESSINGS WITH MOIST EXPOSED BURN OINTMENT (MEBO) VERSUS STANDARD GAUZE DRESSINGS WITH SILVER SULFADIAZINE IN THE TREATMENT OF FILIPINO PATIENTS WITH ACUTE SUPERFICIAL PARTIAL THICKNESS BURNS (229)

*Gumasing E. P.¹, Genuino G. A.¹, Cruz M. A.¹

¹PGH, Surgery, Manila, Philippines

Introduction: The conventional management of burns mainly involves the use of topical silver-based antibacterial creams, specifically silver sulfadiazine (SSD); however, an alternative remedy called moist exposed burn ointment (MEBO), a beta-sitosterol based ointment introduced a few decades ago, could revolutionize the treatment of burn injuries by enabling faster re-epithelialization, relief of pain and prevention of infection that would greatly improve the management of burn cases. The study compared the effects of the use of semi-open dressings with moist exposed burn ointment on superficial partial thickness burns versus that of standard dressings of gauze and silver sulfadiazine in terms of the time-to-healing, the difference in patient acceptability, ease, comfort, and pain levels between the two modes of dressing.

Method: This is a prospective, double-blind, randomized controlled trial involving 60 patients with acute superficial partial thickness burns. From January 2010 to July 2012, 60 patients who were 18 to 45 years of age, consulting at our institution within 24 hours of the injury, with not more than 50% total body surface area burns and with no uncontrolled medical conditions were included in the study. These patients were randomly allocated in the two treatment groups: the semi-open MEBO technique group, or the control group dressed with SSD. Wounds were inspected regularly for signs of infection, as well as re-epithelialization. The patients were likewise asked for the pain score during dressing, as well as during dressing removal, using the visual analogue scale.

Results: No significant statistical difference was noted between the use of standard dressings of gauze and SSD and semi-open dressings with MEBO in terms of time-to-healing (p-value 0.204), indicating that the MEBO can heal superficial partial thickness burns as efficiently as the standard dressings of gauze and silver sulfadiazine. In addition, no statistically significant difference was noted between the use of SSD and MEBO in the treatment of superficial partial thickness burns in terms of ease in removal of dressing (p-value 0.906) and pain while dressing on wound (p-value 0.790). There was, however, a significant difference noted as to the adherence of dressings to wound (p-value 0.038), pain during removal of dressings (p-value 0.027), and time taken to change dressings (p-value 0.06) between SSD and MEBO. This means that patients found MEBO to be more acceptable and comfortable as compared to SSD.

Conclusion: The study revealed that the use of MEBO in treating superficial partial thickness burns is as efficient as SSD in terms of time-to-healing, ease of removal of dressing and pain while dressing on wound. Similarly, the use of MEBO was associated with increased adherence of dressings to wound, less pain during removal of dressings, and faster time taken to change dressings when compared to standard SSD dressings.