PP095 THE EFFECTIVENESS OF PRESSURISED IRRIGATION USING WOUNDJET VERSUS CONVENTIONAL SWABBING IN CLEANING WOUNDS HEALED BY PRIMARY INTENTION

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INTRODUCTION:

There are many types of wound cleaning that have been practicing worldwide, which include conventional swabbing method, use of bulb syringes, piston syringes, pressurized lavage, and ultrasonic wound irrigation. This study evaluates the effectiveness of pressurized irrigation using Woundjet in comparison with conventional swabbing in cleaning wounds healed by primary intention. Woundjet is a pressurized irrigation device that able to generate pulsed or interrupted irrigation using normal saline at a consistent range of impact pressure.

MATERIALS & METHODS:

This was a prospective, multicentre, parallel, randomized controlled trial that includes 100 study subjects that were further assigned into 2 groups randomly at a ratio of 1:1 – Woundjet and swabbing groups. Each patient is required to go through screening, baseline assessments and treatment on day 1, follow up on day 10±3, and final follow up via phone call on day 14±2. 4 efficacy parameters are being evaluated in this study – time taken to clean wounds, cost-effectiveness, time-to-wound healing assessment using ASEPSIS wound scoring and wound symptoms experienced by patients using the modified Toronto Symptom Assessment System for Wounds (TSAS-W-MOD).

RESULTS:

The mean time used for wound cleaning for swabbing was 4.1±2.9 minutes and was 5.5±3.5 minutes for Woundjet. The average total cost of materials used for swabbing was RM6.797±4.032 while Woundjet only costed RM4.217±1.192. For wound healing, the mean ASEPSIS baseline wound score for swabbing was 5.7±6.1 while follow-up wound score was 0.9±3.0. Nevertheless, the mean ASEPSIS baseline wound score for Woundjet was 6.9±7.2 while follow-up wound score was 1.9±4.7. The average total score for TSAS-W-MOD for swabbing was 4.0±3.9 and for Woundjet was 3.5±4.8.

DISCUSSION:

Woundjet is superior in terms of cost-effectiveness while being indifference in terms of efficacy of wound healing, time taken to clean wounds and wound symptoms compared to swabbing in treating primary intention wounds.