**Acute Wounds**

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**RANDOMIZED, DOUBLE-BLIND, CONTROLLED CLINICAL TRIAL ON THE ANTISEPTIC EFFICACY AND TOLERABILITY OF POLIHEXANIDE 0.04% ON ACUTE TRAUMATIC WOUNDS**

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**Aims:** The aims of this study were to compare the antiseptic efficacy of polihexanide 0.04% to Ringer’s solution and to evaluate the local tolerability of polihexanide when used on acute traumatic wounds.

**Methods:** This study was a prospective, controlled, randomized, double-blind, mono-centric study performed with two parallel groups. Patients presenting to an emergency room with an acute traumatic wound were treated with a sterile cotton gauze compress saturated with either polihexanide 0.04% or Ringer’s solution for 60 minutes. Standardized wound cultures were obtained for microbiological quantitative evaluation before and after 15, 30 and 60 minutes of treatment. Burning and pruritis were evaluated by asking the subject to rate these symptoms using a 4-point scale.

**Results:** Sixty-one wounds (60 patients) were included in the study. The comparison between the two groups revealed a statistically significant difference (p=0.006) with a colony forming unit (CFU) log10 reduction of 0.734 ± 1.00 in the polihexanide group and a CFU log10 increase of 0.06 ±0.85 in the Ringer’s solution group after 60 minutes. The comparison over time showed a statistically significant change in the log10 CFU for the polihexanide group (p<0.001), but not for the Ringer’s solution group (p=0.99). Tolerability was good without treatment emergent reactions.

**Conclusion:** The treatment of acute traumatic wounds with polihexanide 0.04% results in a significant decrease in bacterial load and may subsequently prevent the development of an infection.

Reference: polihexanide 0.04% = Lavasept 0.04%