RESULTS OF RCT ON THE ANTIMICROBIAL EFFECTIVENESS OF A NEW SILVER ALGINATE WOUND DRESSING

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Aim: The aim of the study was to compare the efficacy and impact on locally infected wounds of a new silver alginate matrix* to that of a standard alginate dressing.

Methods: 42 patients (20F – 22M), median age = 68.6 (33 - 93) with clinically infected pressure ulcers (24), venous leg ulcers (4), mixed leg ulcers (2), diabetic foot ulcers (6) and acute wounds (6) were studied; all patients presented local signs of wound infection. Severity of wound infection was graded with an infection score (calculated by the presence and/or intensity of clinical signs/symptoms, min. = 0, max. = 18) and quantitative bacterial analysis of wound tissue biopsies (taken during initial visit and after 2 weeks of local treatment). Patients were randomized into either Group A: to be treated with ionic silver alginate dressings on a daily basis or Group B: to be treated with standard calcium alginate dressings on a daily basis. The study period was 2 weeks with the main study endpoint being the regression of infection (score of infection + quantitative biopsy results). As a complement, the virulence of the isolated Staphylococcus aureus, the main strains isolated in our study was estimated in vitro through multiplex PCR based genetic analysis.

Results: At the end of the study, regression of infection was found based on (i) a diminution in the score of infection and (ii) biopsy results demonstrating a substantial reduction in bacterial load. Data on the virulence of analyzed strains suggest that there are S. aureus strains which are infectious and others which are merely colonizing. The correlations between infection score, quantitative bacteria counts and presence of infectious or colonizing Staphylococcus aureus strains in treatment groups is under way.

Conclusions: These findings support the tolerability and antimicrobial efficacy of this new dressing in locally infected wounds.

*Askina® Calgitrol® Ag, B. Braun