

**Can irrigation of infected diabetic foot ulcers with Dermacyn® prior to taking the swab decrease the number of clinically irrelevant microbiological isolates?**

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**Background and aims.** Swabs from diabetic foot lesions usually yield mixed bacterial flora, containing both true pathogens and colonizing microorganisms from the surrounding skin. Meticulous wound debridement and irrigation of the ulcer with sterile 0.9% NaCl solution before taking the swabs eliminates a certain part of colonizing microorganisms and increases the probability of identifying true pathogens. Dermacyn® Wound Care is a super-oxidized solution intended for use in the debridement, irrigation and moistening of acute and chronic wounds. It acts through reducing the microbial load and assisting in creating a moist environment. We speculated that irrigation of foot ulcers with Dermacyn® prior to taking the swab could possibly eliminate the colonizing microorganism and lead to more relevant swab culture results. **Patients and methods.** 10 patients with diabetes and foot ulcer with local signs of infection were included. Two swabs were taken from every ulcer: Swab 1 (S1) was taken after sharp debridement and irrigation with sterile 0.9% NaCl solution. Swab 2 (S2) was taken after additional rinsing of the ulcer base with 50 ml of Dermacyn®. Semi-quantitative aerobic and anaerobic culture was performed. All bacteria that grew from swabs were identified and evaluated for the density of growth (i.e. 1+, 2+ or 3+). The average number of isolates per sample and the average density of growth per sample were recorded for S1 and S2. Isolates that are normally regarded as colonizers (i.e. diptheroids, coagulase negative staphylococci and alpha-haemolytic streptococci) were analysed separately from the clinically significant isolates. **Results.** The average number of all isolates from S1 and S2 was 3.8 and 3.5 (i.e. true pathogens; 2.8 and 2.6, colonizers; 1.0 and 0.9), respectively. The average growth density of all isolates from S1 and S2 was 2.4 and 2.5 (i.e. true pathogens 2.5 and 2.7, colonizers 2.0 and 1.9), respectively. **Conclusion.** The results of the first 10 samples indicate that irrigation with Dermacyn® prior to taking the swab could possibly lead to decreased number and density of isolated colonizers from ulcer swabs. The results need further confirmation on a larger sample.