

INTEREST OF A DRYING AND SOOTHING DERMO-COSMETIC SPRAY IN THE MANAGEMENT OF DIAPER DERMATITIS

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INTRODUCTION

Diaper dermatitis leads to approximately 20% of childhood dermatology visits because of the recurring symptoms. It occurs in an occlusion area in contact with irritants from urine and feces, and subject to frictions. The study aims to evaluate the tolerance and efficacy of a drying and soothing dermo-cosmetic spray, and as such avoiding friction during application, in babies with erythema diaper zone.

MATERIALS & METHODS

In an open intra-individual study under pediatric control, 31 babies (mean age 15 ± 2 months) with diaper erythema were included. Their parents applied the spray after each diaper change (twice daily at minimum) for 28 days. At D0 (Day 0), D7 and D28, clinical signs and repairing efficacy were assessed by the pediatrician using a 5 point-scale (0 to 4), and photographs were also taken. The redness was measured with the a^* parameter using a spectrophotometer at D0 and D7. At D28 the pediatrician evaluated the global efficacy using a 4 point-scale (0 to 3) and the tolerance.

RESULTS

At D7, the spray presented a significant **anti-redness effect** (Figure 1), associated with the significant decrease of the **erythema** at D7 and D28 (Figure 2), as illustrated by the photographs (Figure 3). **Itching and dryness completely disappeared at both D7 and D28**. The repairing efficacy was effective to very effective for 83% of the babies at D7 and 94% at D28 (Figure 4). And the global efficacy was scored effective to very effective for 97% of the babies at D28 (Figure 5).

Concerning the **parents' assessment** between each diaper change, **100% of the parents found the skin was soothed and repaired, with less irritation, discomfort sensation or redness**, and that the spray improved the skin state and respected child's skin.

The spray was very well tolerated during the whole study.

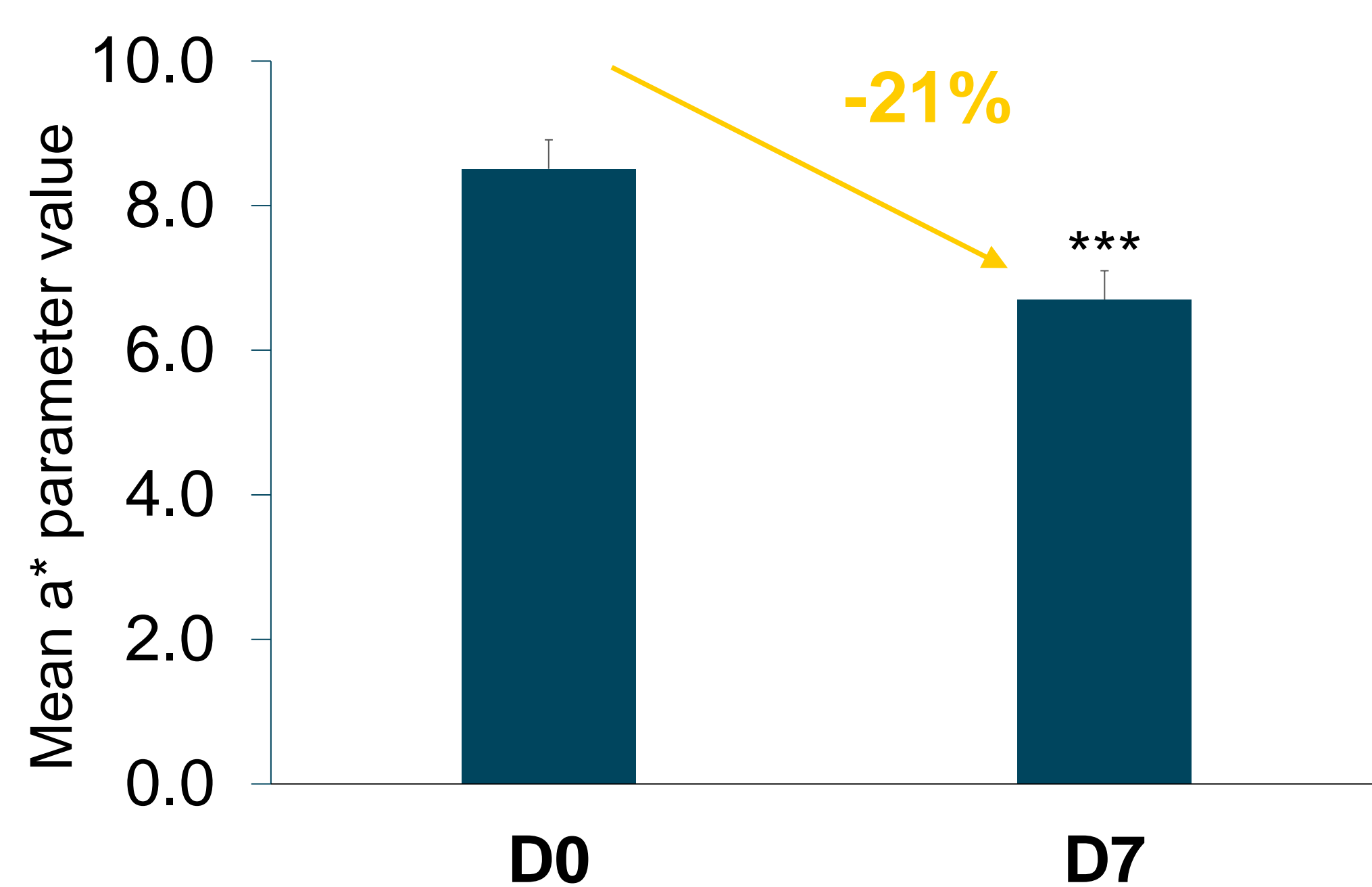


Figure 1: Evolution of the a^* parameter (= redness)
*** $p < 0.0001$, Student T-test

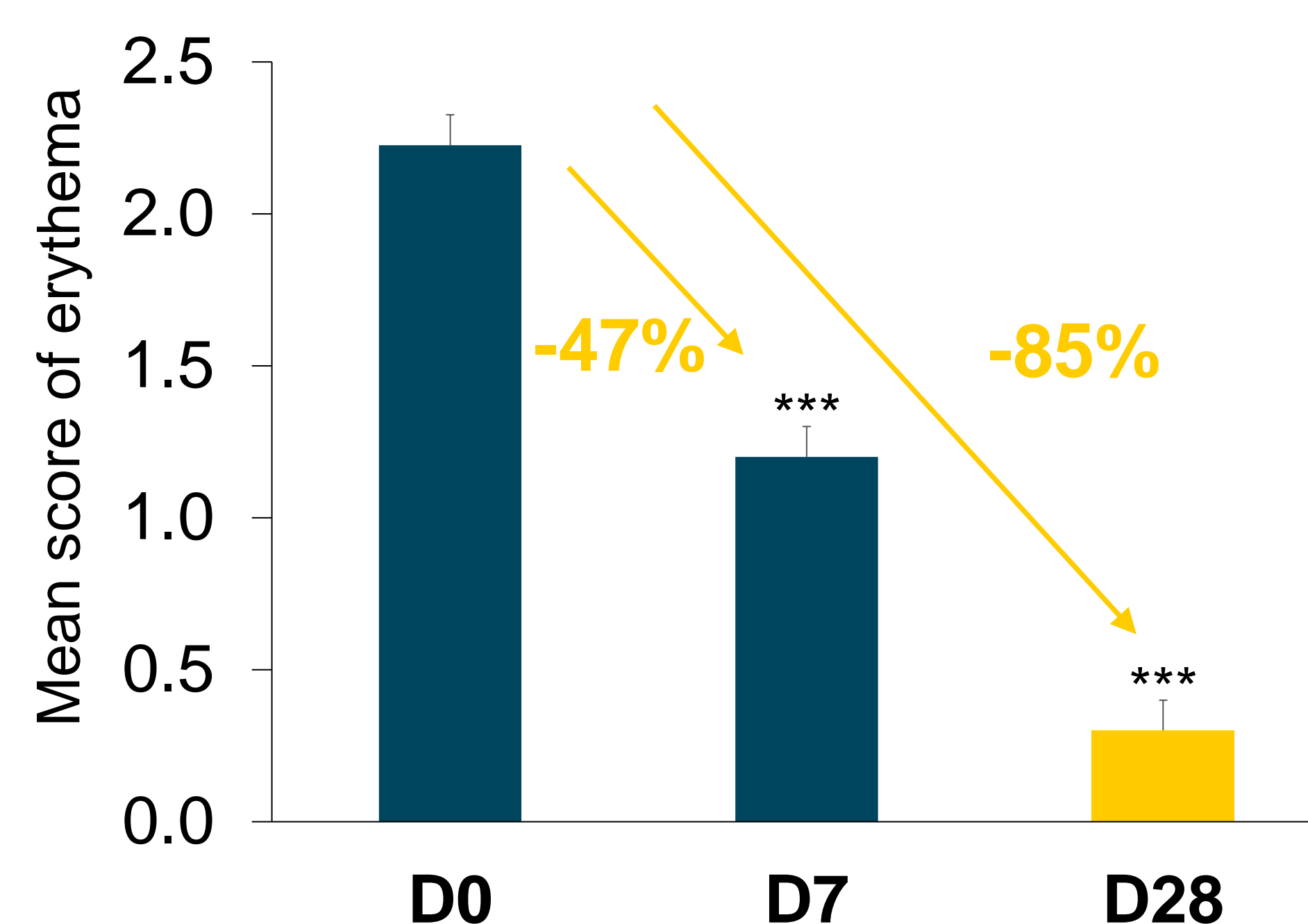


Figure 2: Evolution of erythema intensity
*** $p < 0.0001$, Wilcoxon

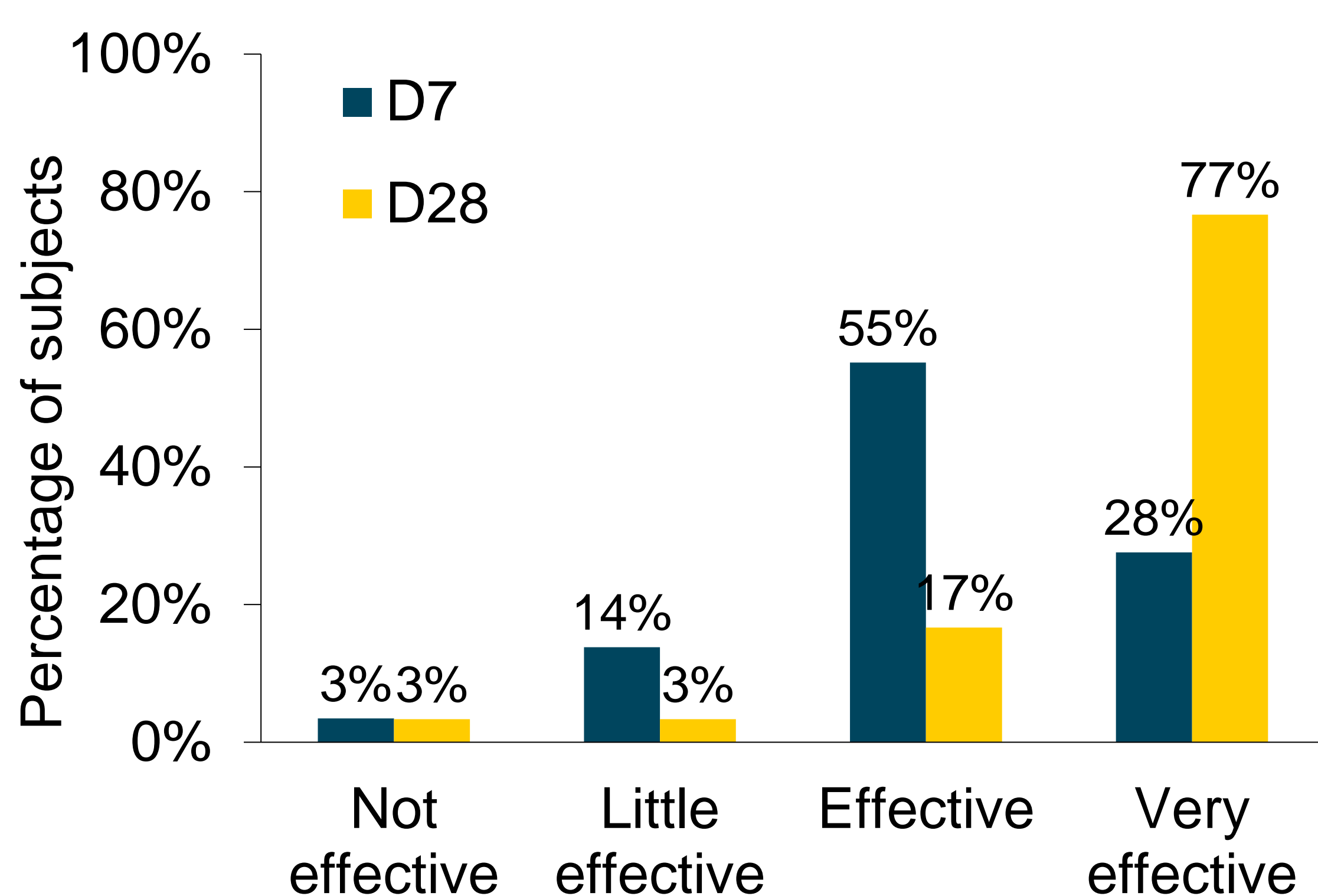


Figure 4: Repairing efficacy by the investigator

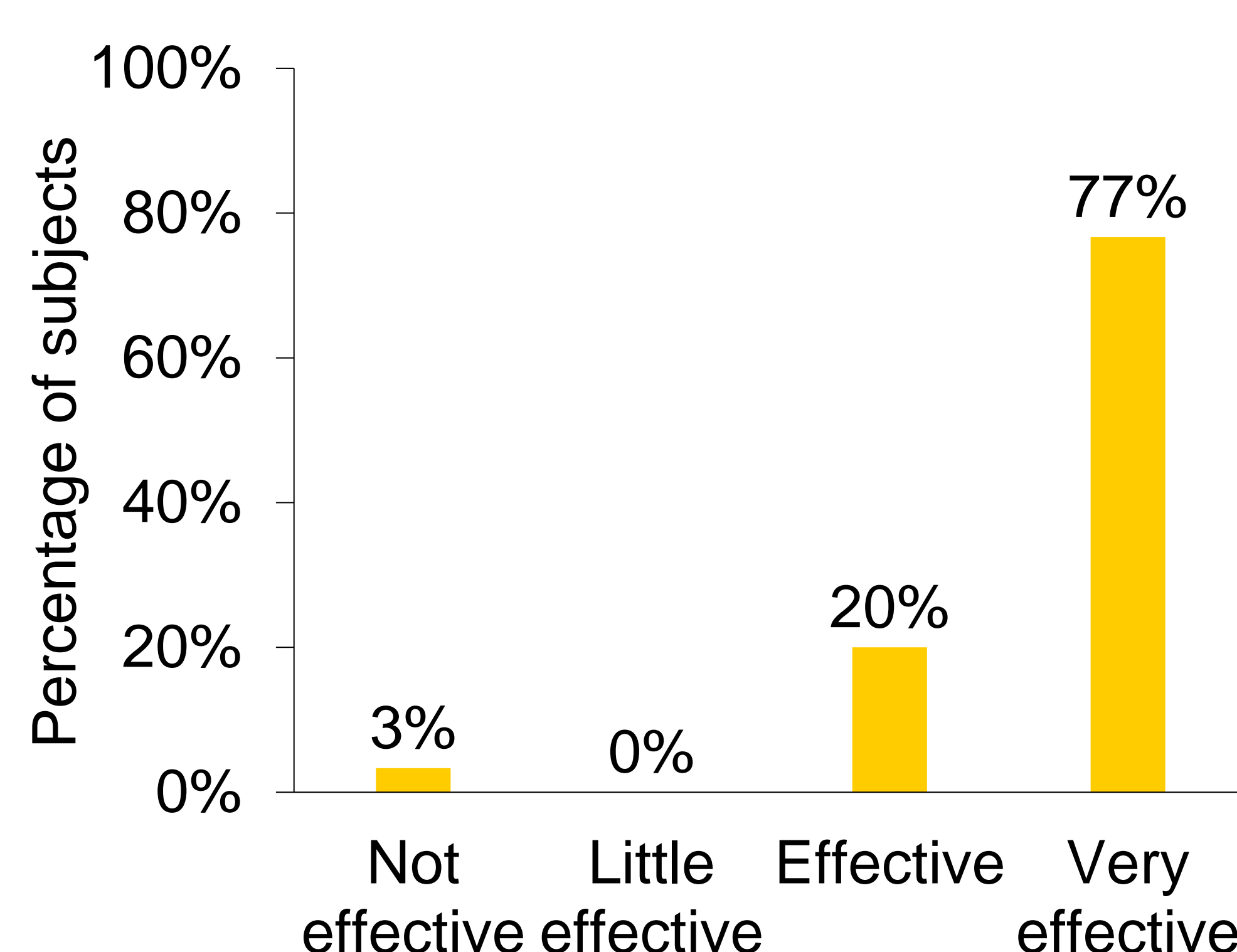


Figure 5: Global efficacy at D28



CONCLUSION

This dermo-cosmetic spray shows very good tolerance and efficacy in the management of diaper dermatitis. Application of such product since the first erythematous sign could contribute to avoid dermatitis onset.