

INTEREST OF AN ADAPTED ASSOCIATION OF A CLEANSER AND A DERMO-COSMETIC CREAM FOR HAND POST-SURGERY CARE

Gayraud F.¹, Chavagnac-Bonneville M.^{1,2}, and Sayag M.¹

¹NAOS Group, Research and Development Department, Aix-en-Provence, France; ²NAOS Institute of Life Science, Aix-en-Provence, France

INTRODUCTION

In hand surgery, the aftercare constitutes an important part of the treatment. It is composed of three steps: the immediate postoperative period, the mobilization, and the rehabilitation with ergotherapy. The postoperative step is important since the following two others cannot start until the wound is healed and the swelling has subsided. In the early postoperative period, the main concern goes to the wound care, treatment of pain and swelling by careful and adequate mobilization/immobilization from hand to shoulder depending on the case, but also to an adapted repairing skincare. The aim of this study is to assess the interest and the safety of a dermo-cosmetic repairing cream associated with a cleanser in the management of hand post-surgery care.

MATERIALS & METHODS

In this prospective observational study, 58 subjects (mean age 58 years old) were included after their hand surgery requiring sutures, mainly on wrist (41%), hand palm (36%), or fingers (20%). They used the cleanser and the repairing dermo-cosmetic cream at least twice daily during 7 days \pm 3, after sutures removal. The survey was a self-assessment questionnaire designed to evaluate the efficacy and safety of both products. On Day 0 (D0), D3 and D7, the subjects filled out the questionnaire to assess inflammation signs (heat, swelling, redness), and discomfort signs (itching, pain, tingling) using a qualitative scale (0=null, 1=slight, 2=mild, 3=severe), and wound healing (scar appearance, scar comfort, repairing) using a quantitative scale from 0 to 10.

RESULTS

At D7, the inflammation was improved according to the subjects with a significant reduction of heat sensation, swelling, and redness on the wound, compared to D0 (**Fig. 1**). Similarly, at D7 the discomfort was improved with a significant decrease of itching, pain and tingling, compared to D0 (**Fig. 2**). The wound healing was assessed by the subjects with a significant improvement of scar appearance, scar comfort and of repaired skin, compared to D0 (**Fig. 3**). Moreover, 84% of the subjects found their skin soothed during the products application, and less painful ($p < 0.001$) and less uncomfortable ($p < 0.01$) immediately after the application. Both products were very well tolerated for 91.4% of the subjects.

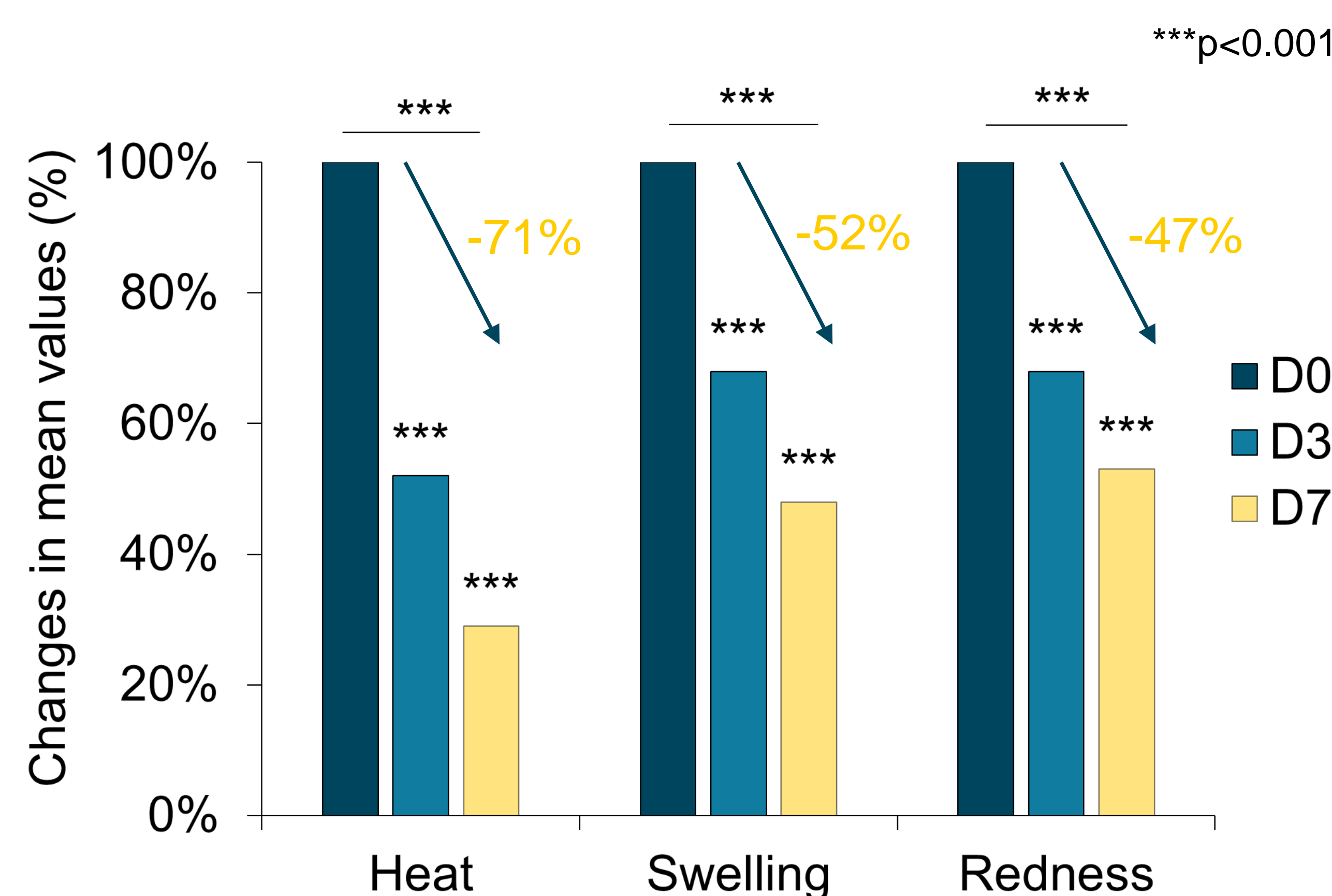


Figure 1: Change in the mean values for the heat, swelling and redness parameters between D0 and D7

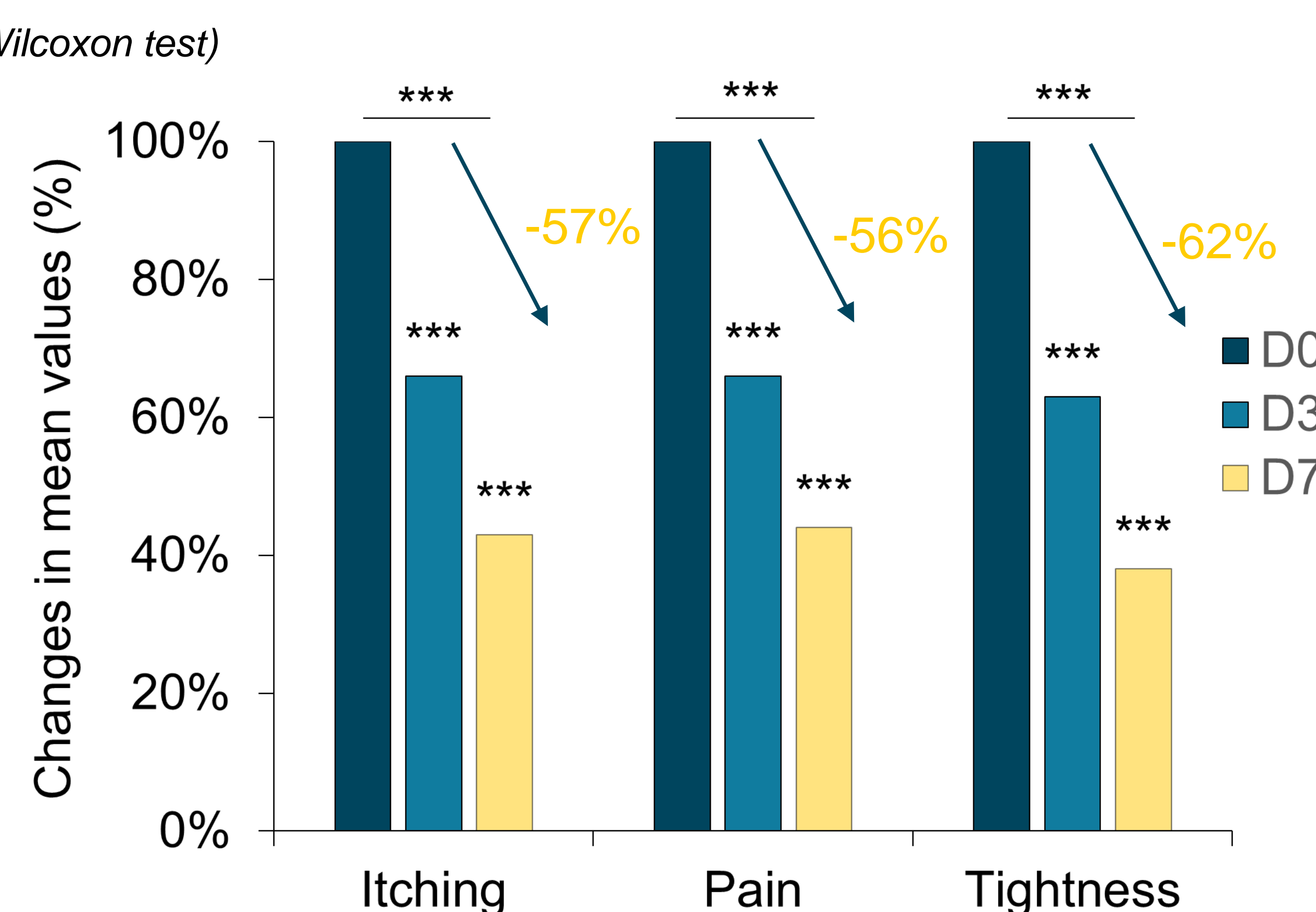


Figure 2: Change in the mean values for the itching, pain and tightness parameters between D0 and D7

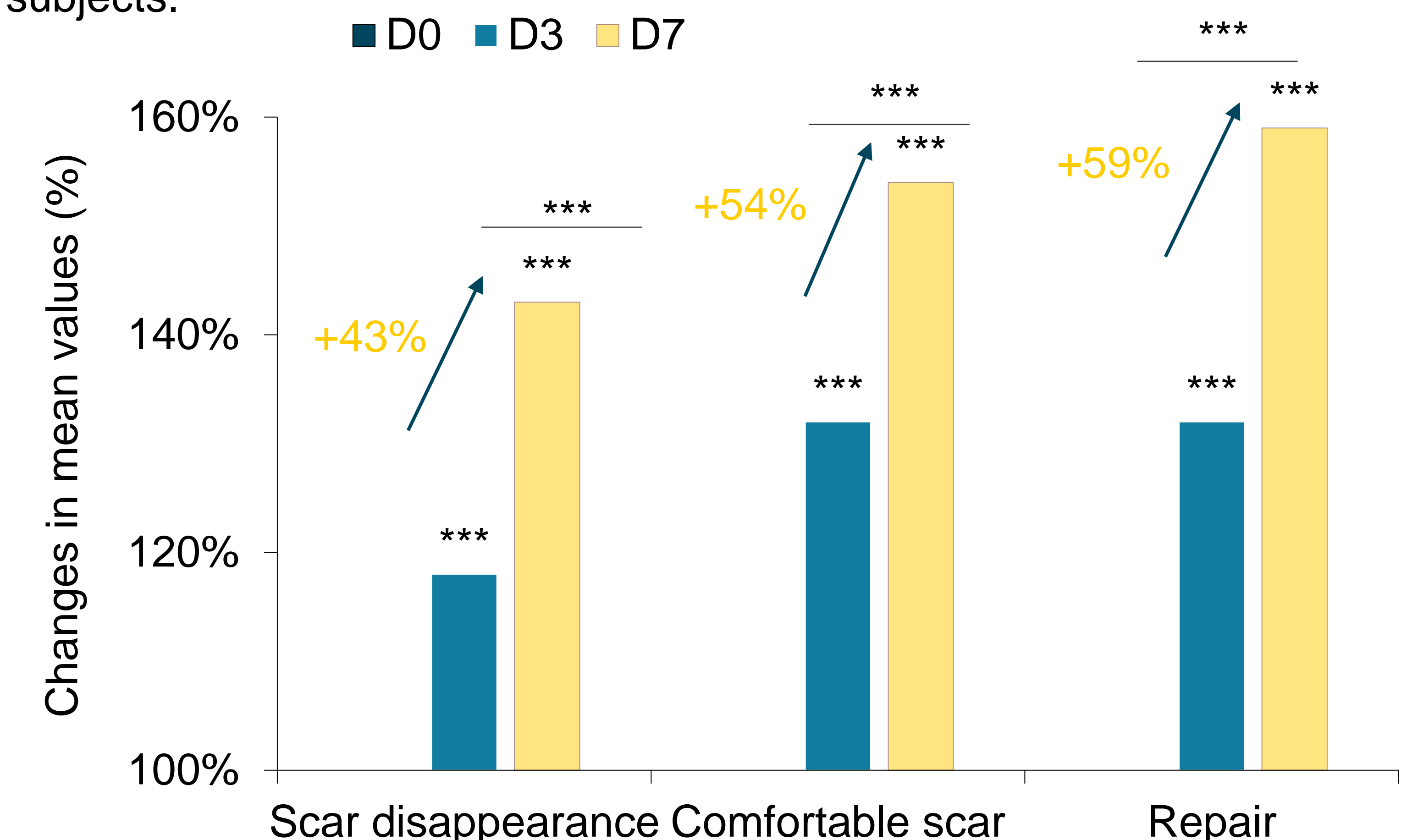


Figure 3: Change in the mean values for the appearance of the scar, scar comfort and skin repair parameters

CONCLUSION

This study demonstrated that the association of these specific cleanser and dermo-cosmetic cream is well adapted for soothing and repairing skin in the management of hand post-surgery care. Since few studies exist in this context, the importance of an adapted choice of hand surgery aftercare should be more easily considered to facilitate a good rehabilitation of the subjects' hand.