

Influence of an Octenidine Based Wound Gel on Postoperative Wound Healing and Scarring after Abdominoplasty

Authors : Johannes Matiasek

Abstract : Introduction and Aims: Octenidine is a common antiseptic agent in the area of surgical interventions because of its antimicrobial efficacy and outstanding biocompatibility index. We investigate the direct postoperative application of octenilin® on typical procedures in the field of plastic surgery in a prospective, randomized controlled intervention study. The aim of this study is to determine the influence of a direct postoperative application of an octenidine-containing wound gel on wound healing and scarring after abdominoplasty. Material and Methods: In this study, we enrolled 33 patients who underwent abdominoplasty because of medical indications (e.g. Cutis laxa abdominis). To ensure an intraindividual comparison, each patient received both dressings (study-group: octenilin® wound gel; control-group: Omnistrip® dry plaster) immediately after surgery. We evaluate wound-healing tendency, pain during dressing changes and scar formation after two weeks, three, six and twelve months. Regarding scar-evaluation skin-elasticity, sebum on the skin, transepidermal waterloss, skin hydration, melanin content and erythema level were determined with special probes. Furthermore the Vancouver Scar Scale (VSS) and pain level during dressing change are determined. Results: At the time of surgery the mean patient's age was 44.1 years. On average 5.6 dressing changes were necessary. Wound healing disorders occurred more often in the control-group. In the control-group (dry plaster Omnistrip®) patients reported significantly more pain and superficial skin injuries during dressing changes occurred. Objective scar-evaluation after 3, 6 and 12 months resulted in a significant higher skin-elasticity and significant lower transepidermal water loss in the octenilin® group which is confirmed in the VSS. Conclusion: The immediate postoperative application of the octenidine-containing hydrogel octenilin® after abdominoplasty results in favoured scar formation compared to our actual standard therapy. Less hypertrophic scar formation was observed in the study-group.

Keywords : abdominoplasty, octenidine, scarring, wound healing

Conference Title : ICPRAS 2016 : International Conference on Plastic, Reconstructive and Aesthetic Surgery

Conference Location : Bangkok, Thailand

Conference Dates : December 12-13, 2016