

# Abdominoplasty following bariatric surgery

## *Use of dressings impregnated with medicinal honey to prevent complications*

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*Abdominoplasty is the only possible treatment for the aesthetic complications that result from weight loss following bariatric surgery. The results of this study, carried out in 120 patients, illustrate that honey dressings promote postoperative wound healing. The improvement in patients' postoperative well-being, the reduction of morbidity and, not in the least, patient satisfaction led us to decide to introduce this procedure.*



Nowadays, obesity is a serious public health problem. Bariatric surgery is acknowledged as an option within the current range of

therapies. This 'radical' treatment has become increasingly popular in the last ten years and the operation was carried out on 45,000 morbidly obese patients in France in 2013 alone. There has also been a corresponding increase in demand for plastic surgery to mitigate the consequences of weight loss. Although abdominoplasty is seen as a perfectly routine operation, it is still associated with a very high morbidity rate: in some series(1) of patients, postoperative complications arose in 50% of the cases. The fact that the operation is carried out on patients who are following a strict diet is one of the factors that complicate these extremely risky wounds even further. In addition, there is localized tension on the skin and the subcutaneous tissue, the wound edges are prone to damage, and the location of the wound - the lower abdominal fold - is a factor for superinfection. Serious complications can occur: localized infections, abdominal wall haematomas, delayed wound healing or even necrosis. This is the background against which we decided to use medicinal honey in an effort to reduce the risk of complications.

**The study was set up** in order to chart the complications that occur following abdominoplasty and assess the benefits of using honey-impregnated dressings to treat this type of wound. The primary aim was to demonstrate that honey-impregnated dressings promote wound healing effectively. The secondary aim was to demonstrate that there is a positive improvement in the patient's wellbeing in the postoperative period - especially during the changing of dressings.

**Patients and methods:** The study was carried out retrospectively in a group of 120 patients who had undergone abdominoplasty. The operations were carried out at the Centre Hospitalier de Saint Brieuc (Fr) by a single surgeon between January 2011 and October 2014. The wound care protocol was implemented in accordance with the following schedule: the first dressing was applied in the operating room using aseptic surgical technique. After closure of the skin with surgical staples, a Revamil® compress was affixed to the wound followed by a secondary, conventional absorbent dressing and a tight, customized-fit elastic support belt. The dressing was changed on day 2 and day 4. Discharge from hospital scheduled for day 4. Pain level is assessed on day 1 and day 4, and pain medication provided on leaving the hospital. A conventional dressing is applied on day 6 by the community nurse. All patients saw the surgeon for a postoperative check-up to assess the progress of wound healing. In the event of internal complications, an abdominal scan was carried out to determine whether reoperation was necessary. The data were collected prospectively and systematically updated. No single case was excluded during the three years covered by the study.

**Results:** Of the 120 patients in the study, 114 had undergone bariatric surgery. The average age of patients was 43 years. Postoperative well-being immediately after the operation was improved by the use of a dressing impregnated with medicinal honey. Fewer wound infections occurred in the group that received honey dressings (22% versus 45%). The period of hospitalization was the same for both groups. Despite the use of a standardized and reproducible method, there was no difference in the incidence of seroma: 29% in the group using honey dressings and 27% in the control group. The percentage of reoperations due to abscess formation was 9% in the group using honey dressings and 32% in the group using conventional dressings.

(1) Abdominoplasty after weight loss in morbidly obese patients: a 4-year clinical experience Obes Surg. 2007.