

## Abdominoplasty Under Spinal Anesthesia: About 34 Cases

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### Abstract:

**Introduction** :Abdominal plasty (AP) is a common plastic surgery procedure that removes unsightly and uncomfortable excess skin and fat from the anterior abdominal wall. It can be performed under general or spinal anesthesia. The purpose of this work is to highlight the interest of spinal anesthesia in this surgery.

**Materials and methods**: Thirty-four abdominoplasties with or without liposuction were performed under spinal anesthesia between June 2016 and September 2018 in the Plastic Surgery Department of the Military Hospital of Meknes.

**Results**: Thirty-three women and one man were counted. The mean age was 42 years. All our patients underwent a transverse low abdominoplasty with umbilical transposition. Associated liposuction was performed in 25 patients (73%) and muscle plasty in 20 cases. Only one patient presented anemia as a complication in our series, and no thromboembolic events or deaths were noted.

**Discussion**: The choice of type of anesthesia depends on the extent of the planned surgery and the patient's state of health. Spinal anesthesia remains a simple and effective technique, it can be an attractive alternative for practitioners trained in these techniques because it reduces the main risks of general anesthesia for obese patients.

**Keywords**: anterior abdominal dermolipectomy, spinal anesthesia, advantages.

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### I. Introduction

Weight variations, pregnancy and aging promote anatomical modifications of the anterior abdominal wall, which cause aesthetic and functional discomfort. Surgery removes excess skin and fat and, if necessary, tightens the muscle strap. The techniques are many and varied, the surgeon may consider a mini-abdominoplasty or a large abdominoplasty with transposition of the umbilicus (1). Two anesthetic techniques are possible: a primed epidural or regional anesthesia, or a general anesthesia. The choice is made according to the patient's profile, the importance of the act, the operating position and the team's habits (2). The objective of this study is to underline the interest of spinal abdominoplasty in the reduction of complications related to the general anesthesia of obese patients.

### II. Materials And Methods

This work is a retrospective study of 34 patients who underwent transverse low abdominoplasty with umbilical transposition with or without liposuction under spinal anesthesia at the Department of Plastic Surgery of the Moulay Ismail Military Hospital between June 2016 and September 2018. Information was collected from medical records and patients were contacted by phone if any information was missing. Incomplete records were excluded from this study.

### III. Results

Thirty-four previous dermolipectomies with transposition of the umbilicus under spinal anesthesia were included over this period (Figure 1). The patients included were predominantly female (33 F/ 1 H). The mean age at the time of surgery was 42 years [23-62]. 4% of the patients were diabetic and 14% hypertensive and 30% had a caesarean delivery. The mean preoperative BMI was 33 kg/m<sup>2</sup> [25-45]. Twenty-five patients underwent liposuction at the same time as the operation (two-thirds of patients 73%) (Figure 2). 20 patients (58%) benefited from diastasis treatment by plication of the rectus abdominis, 6 cases (17%) of umbilical hernia. Complications were extremely rare: only one patient had postoperative anemia. All patients were able to move around during the operation according to the surgeon's instructions. Patients were satisfied with the operation and there were no complaints about the lack of anesthesia intraoperatively.



figure1: abdominoplastie transversale basse avec transposition de l'ombilic

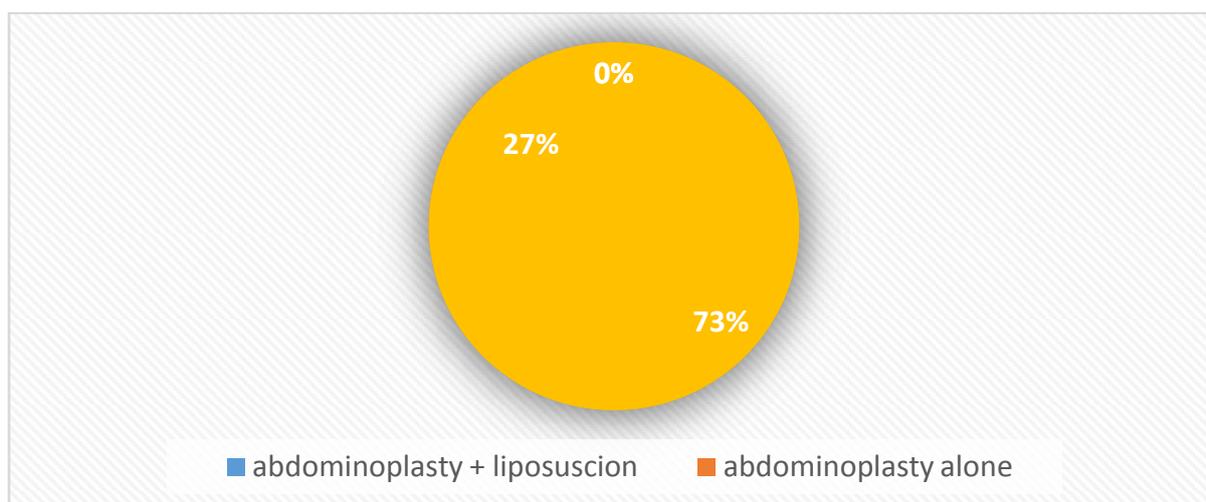


figure2 : répartition des patients selon la technique adopté

#### IV. Discussion

Spinal anesthesia is a technique, very widespread because it is simple and efficacious, and is similar to that of a lumbar puncture. The puncture is performed in a sitting position or in a lateral decubitus position, between two spinous processes (3).

Yitzhak Ramon and all have demonstrated that abdominoplasty under epidural anesthesia has many advantages including the reduction of complications related to general anesthesia of obese people (4) which is the case in our series:

- Allows a good muscular relaxation
- Abdominoplasty is often combined with liposuction and requires several intraoperative position changes. A conscious patient, who retains the ability to cooperate with the surgeon throughout the operation, makes the surgeon's work easier and more efficient.
- The transfer to the recovery room is simple and convenient because the patient is awake.
- Good postoperative analgesia by the addition of an adjuvant such as an opiate, morphine or sufentanil.
- Reduction of postoperative consequences induced by general anesthesia: significantly less postoperative nausea and vomiting, less drowsiness, less difficulty waking up.
- Reduced problems related to tracheal intubation: fewer sore throats, fewer broken teeth, and elimination of the risk of intubation (difficult for some people).
- Possibility to drink and eat more quickly in the postoperative phase.
- Reduction in the rate of major complications such as thromboembolic events.

## **V. Conclusion**

Abdominoplasty with or without liposuction, a frequent procedure in cosmetic surgery, under epidural anesthesia is safer for the patient and easier for the surgeon.

### **Conflict Of Interest :**

The authors declare that they have no conflict of interest.

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