# The Association of Abdominoplasty with Breast Reduction (Mommy Makeover): Experience in An African University Hospital

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#### Abstract

**Background:** The popularity of breast reduction and abdominoplasty has significantly increased over the years, according to statistics from the American Society of Plastic Surgeons 2022. As a result, the Mommy Makeover, a procedure combining breast surgery and abdominoplasty, is not uncommon. Patients and Methods: A retrospective descriptive study was conducted over a four-year period within the Plastic and Aesthetic Surgery Department of the IBN SINA University Hospital, Rabat, Morocco.

**Results:** Five cases of Mommy Makeover were operated on within the Plastic and Aesthetic Surgery Department of the IBN SINA University Hospital, Rabat, Morocco. One case was addressed two years after bariatric surgery. The procedure combined breast reduction with the superior-internal pedicle technique with Wise's pattern and abdominoplasty. No major complications were observed.

**Discussion:** Since the introduction of abdominoplasties combined with breast surgery, several concerns have been associated with this combination. Venous thromboembolism is the most commonly discussed consequence in combined plastic surgery procedures. The risk of venous thromboembolism is not elevated when abdominoplasty and breast reduction are combined. The study emphasizes the importance of careful patient selection and attentive venous thromboembolism prevention. It assesses the validity of the Davison-Caprini framework for venous thromboembolism risk stratification and prophylaxis in plastic surgery. Other measures to prevent complications were cited in the literature and followed by our operating team.

**Conclusion:** With the help of a simple risk stratification tool that takes into account diabetes, age, BMI, and ASA status, we can guarantee favorable results for women who may want combined surgery.

Keywords: Mommy Makeover, Abdominoplasty, Breast Reduction

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# Introduction

The popularity of breast reduction and abdominoplasty has significantly increased over the years, according to the 2022 statistics from the American Society of Plastic Surgeons (ASPS). The figures for breast reduction and abdominoplasty are 74,492 and 202,184, respectively. It is not uncommon for patients, dissatisfied with the appearance of their breasts, to also desire an abdominal procedure, and vice versa. This is usually due to their mirror reflection.

As a result, the Mommy Makeover, a procedure combining breast surgery and abdominoplasty, is not uncommon. This method eliminates the need for a second surgical treatment, reduces overall recovery time, and can reduce expenses.

The aim of this study is to describe the clinical history, presentation, intraoperative findings, and complications of the patients. Along with a review of the literature, we assess the importance of these results and the therapy strategy.

# **Patients and Methods**

A retrospective descriptive study was conducted between January 2019 and January 2023, spanning

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a four-year period within the Plastic and Aesthetic Surgery Department of the Ibn Sina University Hospital, Rabat, Morocco.

Data were extracted from patients' medical records, including clinical, surgical, therapeutic, evolutionary information. The study of the files was carried out using a pre-established operating sheet. For each patient, we collected epidemiological data (age, sex, etc.), anamnestic data (pathological antecedents, pregnancy, bariatric surgery or weight loss, Body Mass Index (BMI), etc.), clinical and paraclinical data (weight, height, type of breast ptosis, presence of diastasis, stretch marks, etc.), therapeutic (liposuction volume, breast reduction weight, etc.), and progressive data (healing time, complications, length of stay, etc.). The data was collected and processed using an Excel 2017 file. The data was then analyzed with SPSS version 21 software.

## Results

In total, five cases of Mommy Makeover were operated on within the Plastic and Aesthetic Surgery Department of the Ibn Sina University Hospital, Rabat, Morocco. The results begin with an age study; the average age of the patients was 38 years. All our patients were, on average, mothers of two children. None of the patients were known to smoke. One case was addressed two years after bariatric surgery. The average Body Mass Index (BMI) of our study group was 27.39.

The procedure, as well as the subsequent operations, were explained. In addition to the standard preoperative assessment, all women were asked for mammography and cardiology advice. After informed consent and taking photos, the marking was done the day before the operation (Figure 1).

The procedure was conducted under general anesthesia

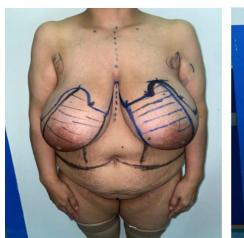




Fig. 1: The Marking of the abdominoplasty and the breast reduction with the superior-internal pedicle technique with Wise's pattern



Fig. 2: Immediate postoperative results





Fig. 3: Results after three days (A) and after 40 days (B)

in decubitus dorsal position. Antibiotic therapy was administered (2g of amoxicillin – clavulanic acid), along with the placement of a urinary catheter. We initiated the procedure with abdominal infiltration by adrenaline serum. Then, we performed the reduction using the superior-internal pedicle technique with Wise's pattern. This was followed by liposuction of abdominal fat, with an average volume of 4 liters. Anterior dermolipectomy was performed, associated with a diastasis cure in all patients.

Four drains were put in place (Figure 2). The average total duration of the procedure was 6 hours. Postoperative pain was controlled by analgesics (codeine). A control cell blood count (CBC) was conducted for all patients. Two packed blood cell transfusions were administered for one patient.

Compression stockings were worn before the procedure and for a postoperative month. Chemical anticoagulation started postoperatively (Enoxaparine 40mg/ml) and was maintained for 10 days.

Antibioprophylaxis, based on amoxicillin-acid clavulanic, was administered for 7 days. The postoperative position was a sitting position with raised legs, and early rising was encouraged the day after the procedure. Drains were removed on Day 3, which was also when the compression sheath was worn.

The average hospital stay was 4 days. Lymphatic drainage was initiated on Day 10. One patient presented with 79% hypoxia on Day 1 postoperatively. All paraclinical explorations were negative, with improvement observed under oxygen therapy.

One of our patients presented a suture disunity at the angle of the inverted T, with small necrosis treated by directed healing. Post-operative follow-up was carried out by monitoring each week for one month and then each month (Figure 3).

#### Discussion

Since the introduction of combined abdominoplasties and breast surgery, several concerns have been associated with this combination. According to a comprehensive study conducted by Winocour, which assessed the risk of complications for combined abdominoplasty, the top three complications are hematoma, infection, and Deep Vein Thrombosis (DVT). The study also demonstrated that the combination of abdominoplasty with liposuction and breast reduction increases the risk of complications to 4.6%. The risk factors identified in this study include obesity, smoking, age over 60, and diabetes.

Matarasso and Smith described successful strategies for the combination of abdominoplasty and breast surgery. These strategies included careful patient selection (low-risk patients of type ASA I, BMI < 30), infection prevention, discontinuation of any drug intake, prevention of VTE, and reducing the total operating time to 3 to 4 hours.

Nevertheless, in our series, patients undergoing combined surgery were younger, had no associated comorbidities, and had an average BMI of 27.39, which explains the absence of major complications.

Venous thromboembolism is the most commonly discussed consequence, even more dangerous, perhaps fatal, sometimes referred to as the "elephant in the room," in combined plastic surgery procedures (4,5). According to Simon et al. (6), the risk of venous thromboembolism is not elevated when abdominoplasty and breast reduction are combined. The study emphasizes the significance of cautious patient selection and attentive venous thromboembolism prevention.

Hatef et al. (7) assess the validity of the Davison-

Caprini framework for venous thromboembolism risk stratification and prophylaxis in plastic surgery. They found that the Davison Caprini model effectively stratifies patients undergoing combined procedures.

Other measures to prevent complications were cited in the literature and followed by our operating team. These include having an experienced and coordinated operational team to limit the total operating time, reducing the use of blood transfusion by reasoning the volume of liposuction (8), maintaining normothermia (9) in the operating room, and the use of tranexamic acid (10).

Abdominal contention and a breast bra should not be recommended for immediate post-operative use to avoid respiratory problems. Key areas should be checked several hours after the completion of the procedure and before discharge: the NAC and suprapubic region for ischemia.

Screening for deep vein thrombosis is crucial: any patient with leg pain or swelling is assessed quickly by Doppler. Monitoring and education of the patient and her caregiver on the detection of complications are essential. The follow-up of patients continues to detect the formation of seromas and assess the overall quality of healing.

#### Conclusion

As the demand for abdominal procedures and breast cosmetic surgery increases, a combined procedure is a practical and relatively cost-effective way to accomplish both.

Our results reinforce the growing evidence that supports the safety of a combined procedure, especially in a carefully selected patient population.

With the help of a simple risk stratification tool that takes into account diabetes, age, BMI and ASA status, we can guarantee favorable results for women who may want combined surgery.

### **Conflicts of Interest**

All authors declare that they have no conflicts of interest.

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#### **Financial conflicts**

None.

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