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## PLASTIC SURGERY AFTER BARIATRIC SURGERY: REVIEW OF THE LITERATURE

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ABSTRACT Plastic surgery is increasingly common for individuals who have undergone bariatric surgery and suffer from excess skin and tissue laxity. A literature review of studies from the past decade found that over 50% of bariatric surgery patients experienced excess skin in the arms and 75.5% experienced it in the abdomen. Plastic surgery can improve the quality of life for these patients by improving appearance and self-esteem. However, potential risks and complications such as infections, bleeding, and poor wound healing should be taken into account before the procedure. The most common plastic surgery procedures include abdominoplasty, breast surgery, brachioplasty, thigh lift, and face and neck lift.

## **KEYWORDS :** Plastic Surgery, Body contouring, Gastric bypass surgery, Liposuction, Surgical outcomes.

### INTRODUCTION

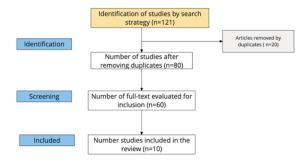
Bariatric surgery has become a popular option for weight loss in individuals with morbid obesity. Despite the health benefits for patients, a significant number of patients have been observed to experience excess skin and flabby tissue after weight loss, negatively affecting their quality of life. It is in this context that plastic surgery after bariatric surgery emerges. This issue has become an increasingly important and interesting topic in the medical literature. Several studies have investigated the epidemiology and prevalence of this problem in patients undergoing bariatric surgery. An observational study of 1,945 bariatric patients showed that 75.5% of patients had excess skin in the abdomen and 52.8% had excess skin in the arms after weight loss (1).

Other studies have also shown a high prevalence of excess skin and flabby tissue in patients after bariatric surgery. A prospective cohort study of 33 patients showed that 100% of patients had excess abdominal skin after weight loss, which significantly affected their quality of life (2). In addition, patients with excess skin have been observed to have a higher risk of skin infections and ulcers (3).

Given the high prevalence and negative effects on patients' quality of life, plastic surgery after bariatric surgery has become increasingly common in clinical practice. However, the risks and benefits of these interventions need to be considered. This article will review the available literature on plastic surgery after bariatric surgery and discuss the implications for clinical practice (4).

### **MÉTHODS**

A comprehensive literature search on plastic surgery after bariatric surgery was conducted following a methodology based on several steps. Firstly, a list of relevant keywords such as "plastic surgery", "bariatric surgery", "body contouring surgery", "excess skin", "complications" and "results" was identified. These keywords were used to search medical databases such as PubMed, Cochrane Library, Scopus and Google Scholar. A search strategy was established using Boolean operators such as "AND" and "OR" to combine the keywords and obtain more accurate results. The search was limited to the last 10 years and articles in Spanish and English were included. Titles and abstracts of the obtained articles were evaluated to identify those relevant to the topic of the narrative review. Full articles were then read to obtain detailed information on the results and complications of plastic surgery after bariatric surgery. Data synthesis was performed to elaborate the present narrative review (Figure 1).



## Figure 1. PRISMA.

### Indications And Contraindications

Plastic surgery after bariatric surgery has become increasingly popular to improve the appearance and quality of life of patients who experience excess skin and tissue laxity following significant weight loss. However, it is important to consider the indications and contraindications for these procedures. Some indications for plastic surgery after bariatric surgery include excess skin and tissue laxity in areas such as the abdomen, arms, thighs, and breasts, which can cause discomfort, difficulty with hygiene, and interfere with daily activities. Additionally, plastic surgery can improve body image and self-esteem, which can have positive impacts on mental health and overall well-being (5).

On the other hand, there are also contraindications to plastic surgery after bariatric surgery, including poor overall health, uncontrolled medical conditions such as diabetes or hypertension, smoking, and obesity-related complications such as venous stasis or poor wound healing. Additionally, it is important to consider the potential risks and complications associated with these procedures, such as infection, bleeding, and poor wound healing. Overall, a thorough evaluation of each patient's individual situation is necessary to determine the appropriateness of plastic surgery after bariatric surgery (5,6).

### Body Contouring Surgery Or Local Removal Of Skin

Body contouring surgery after bariatric surgery has become increasingly common due to the rise in the number of people seeking to lose weight through surgical procedures. Body contouring surgery includes a variety of surgical procedures that aim to remove excess skin and fat following massive weight loss. These procedures may include an abdominoplasty, brachioplasty, thigh lift, and buttock lift. A review of the literature shows that body contouring surgery has many benefits for patients after bariatric surgery. These benefits include an improvement in quality of life, increased self-esteem, and a reduction in medical complications related to excess skin. Additionally, body contouring surgery can improve a patient's ability to perform physical activities and improve posture (7).

However, body contouring surgery can also have complications, such as infections, scarring, and hematomas. Additionally, these procedures can be costly and require multiple surgeries. Therefore, some patients may opt for local skin removal instead of a complete body contouring surgery. Local skin removal is a less invasive and more economical option than complete body contouring surgery. This option involves the surgical removal of skin and fat in a specific area, such as the arms or abdomen. While this option may not provide the same aesthetic improvement as complete body contouring surgery, it may be a suitable option for patients looking to reduce excess skin in a specific area (8).

#### **Common Plastic Surgery Procedures**

Common plastic surgery procedures are often sought after bariatric surgery to address excess skin and body contour irregularities. The most commonly performed procedures include abdominoplasty, breast surgery, brachioplasty, thigh lift, and face and neck lift. Abdominoplasty, also known as a tummy tuck, is one of the most common procedures to address excess skin and fat in the abdomen. Breast surgery can include breast lift, breast reduction or augmentation to restore breast volume and shape. Brachioplasty is a procedure that removes excess skin and fat from the upper arms. Thigh lift is a procedure that addresses excess skin and fat in the thighs. Face and neck lift can address sagging skin and wrinkles in the face and neck (8).

Studies have shown that plastic surgery procedures after bariatric surgery can significantly improve patients' quality of life, self-esteem, and body image. Patients reported increased satisfaction with their appearance and greater confidence after surgery. However, plastic surgery after bariatric surgery can also present some complications, such as wound healing problems, infection, and blood clots. One study evaluated the safety and effectiveness of plastic surgery after bariatric surgery in 126 patients. The authors reported a significant improvement in body image and quality of life after surgery, with no major complications reported. Another study examined the effect of plastic surgery on weight loss maintenance in bariatric surgery patients. The authors found that patients who underwent plastic surgery had greater weight loss maintenance compared to those who did not undergo plastic surgery (8,9).

Despite the benefits of plastic surgery after bariatric surgery, it is important for patients to be well-informed about the risks and potential complications of the procedures. Patients should discuss their expectations and concerns with their surgeon to ensure they are good candidates for the procedures. Plastic surgery procedures after bariatric surgery can significantly improve patients' quality of life and body image. Abdominoplasty, breast surgery, brachioplasty, thigh lift, and face and neck lift are the most commonly performed procedures. However, patients should be aware of the potential risks and complications associated with these procedures and discuss their concerns with their surgeon (9).

#### **RESULTS AND COMPLICATIONS**

The results of plastic surgery after bariatric surgery can vary depending on the type of procedure performed. Generally, most patients experience significant improvement in the appearance of their body after surgery. Patients typically notice a significant reduction in excess skin and fat, which allows them to feel more comfortable and confident in their body. Additionally, patients may also experience an improvement in quality of life and a reduction in medical complications related to excess skin.

However, plastic surgery after bariatric surgery can also come with complications. These can include infections, hematomas, skin necrosis, and healing problems. In some cases, additional surgeries may be needed to correct these complications. Therefore, it is important for patients to be wellinformed about the risks and benefits of surgery before making a decision. One study found that patients who underwent body contouring surgery after bariatric surgery experienced a significant reduction in levels of depression and anxiety compared to patients who did not undergo surgery. Additionally, patients who underwent surgery also reported greater satisfaction with their appearance and an improvement in their overall quality of life.

Another study found that plastic surgery after bariatric surgery can also have health benefits. For example, patients who underwent body contouring surgery experienced a significant improvement in their ability to perform physical activities and in their posture. They also experienced a reduction in blood pressure and an improvement in diabetes control. Overall, the results of plastic surgery after bariatric surgery can be very positive. However, it is important for patients to understand the risks and benefits of surgery and to work closely with their healthcare team to make the best decision for their individual situation.

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