

# 1 Remodeling Breast and Torso 2 with Combined Fat Liposuction 3 and Grafts

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## 5 37.1 Introduction

6 A feminine body that is aesthetically pleasing involves  
7 different concepts of beauty. These concepts are as old  
8 as humanity itself. A rounded, well-shaped breast, nar-  
9 row waist, and wider hips are symbols of fertility,  
10 encoded in our human brains to preserve the species.  
11 The delicate equilibrium between these different ana-  
12 tomical features has been modified by external factors  
13 like race, trends and fashion, and ultimately, by health.  
14 Mainly the relationship between the breast size and  
15 shape and the contour of the hip-waist line are the key  
16 for obtaining a good result.

17 The improvement of these features can be accom-  
18 plished in many ways. The use of implants in the breast  
19 area is the gold standard: the results are aesthetically  
20 pleasant, reproducible, and reliable in most patients.  
21 Nowadays, there is an increasing demand for aesthetic  
22 enhancement in the breast area; some factors can lead  
23 to think alternatives of implants. The use of fat grafts  
24 in the breast area has been spread in recent times.  
25 Using free-fat autologous grafts as a filling material  
26 was first proposed in 1893 by Neuber, the idea rapidly  
27 gained enthusiasm and endorsements. Since then, fur-  
28 ther clinical works by Guerrerosantos [4,5], Bircoll  
29 [6], Coleman [7–10], and others [11–24] have shown

that it is possible, by careful handling of transplanted 30  
fat, to improve the survival of this tissue. Fat has many 31  
attributes of the ideal filler, although the long-term 32  
results are technique-dependent, especially on the breast 33  
area, achieving divergent results [1]. Also, the concern 34  
of misguidance in cancer detection should be taking 35  
into account [2,3]. 36

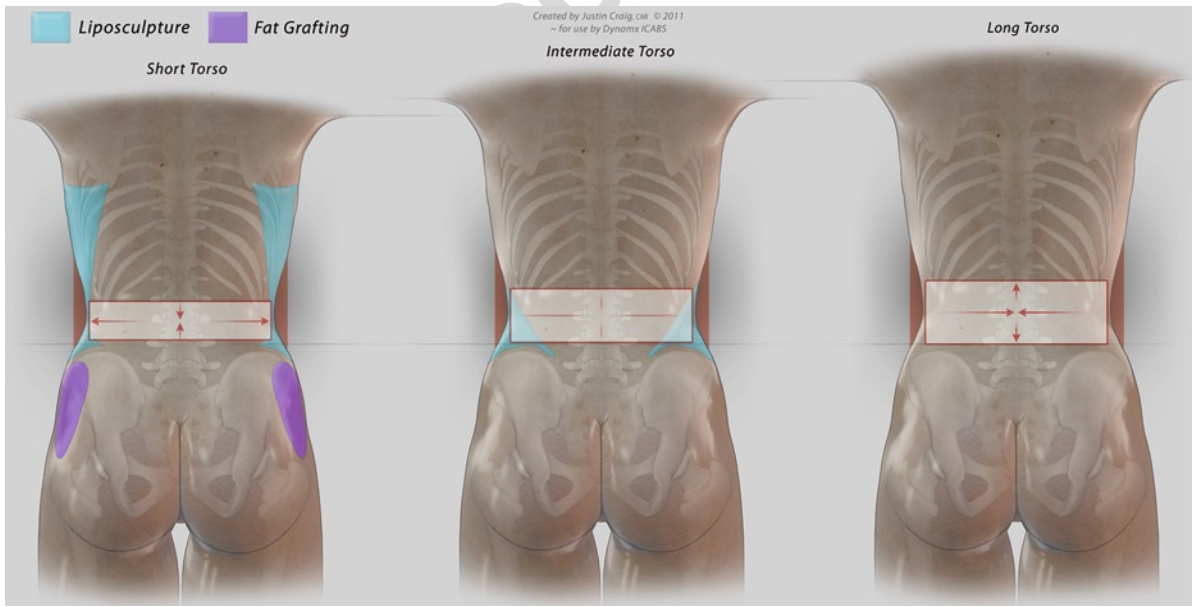
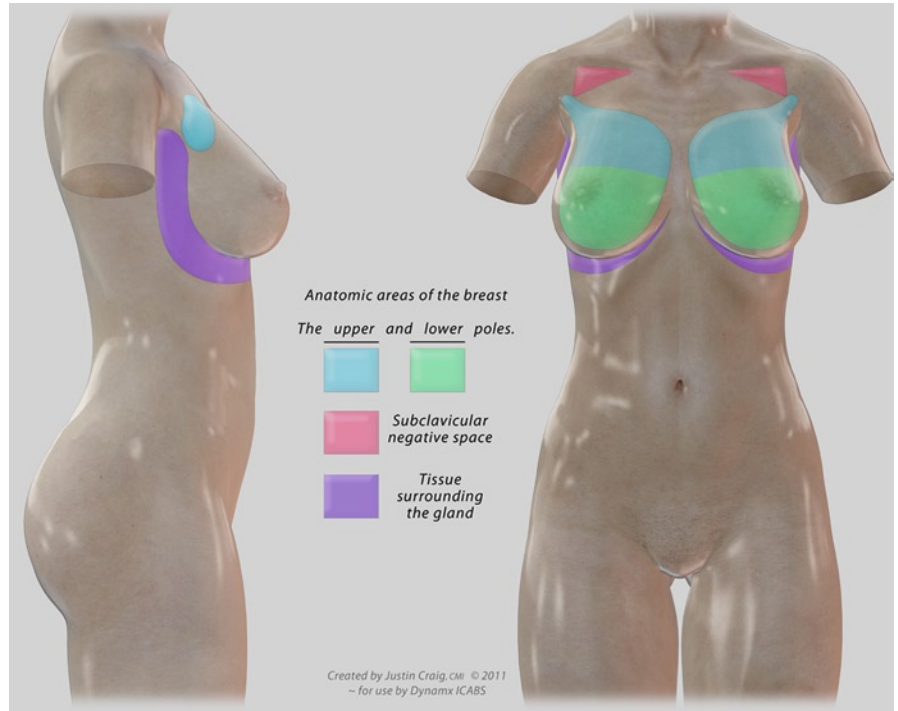
The waistline can be easily molded by liposuction. 37  
However, the waist is influenced mostly by the bony 38  
structures of the rib cage and the hip bones, and above 39  
all, of the distance between these two. The more the 40  
distance, the narrower the waist can be. The goal is to 41  
narrow the upper back and enhance the hip area to emu- 42  
late the desired hour-glass shape in female, with a wider 43  
apex on the hip line. To augment the hip region, the 44  
only option is the use of fillers, specifically fat grafts 45  
and reshaping through liposuction of the waistline. 46

## 37.2 Anatomy (Fig. 37.1) 47

An appealing feminine shape tends to preserve the 48  
“hour glass”, conferring special attention to the breast 49  
and hip areas. The breast has a rounded shape as 50  
defined by the breast gland contour. Some of the ana- 51  
tomical features surrounding the breast gland are 52  
important to enhance the shape and the relative volume 53  
of the gland: the triangular area between the subclavic- 54  
ular line in junction with the deltoid muscle, the axil- 55  
lary portion of the gland, or Spence tail; and the area 56  
surrounding the lateral pole of the gland, which should 57  
be absent of fat following a “lazy S”. The breast itself 58  
for this purpose is divided into upper and lower poles. 59

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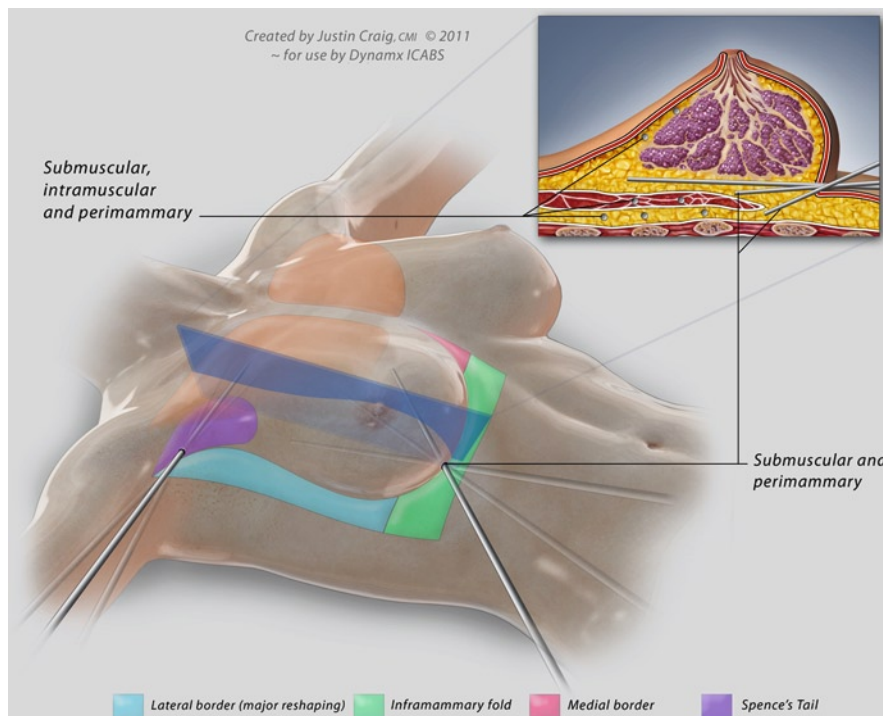
**Fig. 37.1** Anatomic areas of the breast. The upper (blue) and lower (green) poles. The subclavicular negative space (orange). The surrounding tissue around the gland (purple)



**Fig. 37.2** Hip-thorax distance and ratio, indications for fat grafting on the short torso (left) combined with waist and upper back liposuction. Intermediate torso (center), indication for waist liposuction+optional fat grafting. Long torso (right) only

requires waist liposuction, in some cases even hip liposuction. There is a correlation between the V- (short), square- (intermediate) and A-shaped (long) torso with the Hip-thorax distance and ratio

**Fig. 37.3** The axillary and inframammary crease approach to multilayer fat grafting (submuscular, intramuscular, subglandular). Notice the upper pole as the only point for subdermal filling



60 The torso is considered as an aesthetic unit that has  
 61 many factors of influence: one is the full length of the  
 62 torso, so the female torso can be divided into short,  
 63 medium, or long. In the hip area, the indication for fat  
 64 grafting is defined by the relationship between the tho-  
 65 rax and the hip. In a posterior view, the ideal feminine  
 66 shape is when the thorax is smaller than the hip. There  
 67 are three basic contours (Fig. 37.2):

- 68 1. A shape when thorax-hip ratio is < 1
- 69 2. Squared when the ratio is 1:1
- 70 3. V shape: > 1

71 Square and V shape are indication for fat grafting.  
 72 Additionally, a V shape should be treated by extensive  
 73 liposuction and waist liposuction. Also, the distance  
 74 between the rib cage versus iliac crest determines the  
 75 indication for fat grafting and/or upper back liposuction.

### 37.3 Surgical Technique

77 Marking: in stand up position, outline the gland. Mark  
 78 the areas that need more projection (specially the supe-  
 79 rior pole of the breast), to be treated with fat transplan-  
 80 tation. The surrounding area of the breast, essentially  
 81 the lateral and lower portion, to be resected by liposuc-  
 82 tion. In the hip area, the point of maximum projection

in the posterior view, and the trochanteric depressions  
 are marked.

Deep layer lipoplasty: Under general anesthesia,  
 proceed to infiltrate tumescent solution with 1,000 mL  
 of normal saline, 50 mL of lidocaine 1%, and 1 ampule  
 of epinephrine 1:1,000. The ratio of infiltration and  
 volume of fat removed is approximately 2:1. The aspi-  
 ration of fat includes all the major contour deformities.  
 Special attention is paid to the waistline and the lateral  
 axillary region.

Superficial lipoplasty: in the superficial layer, aspi-  
 ration sculpting the anatomical muscular lines is per-  
 formed. In VASER patients, it was used in 80% pulsed  
 mode using a 2.9-mm probe (Sound Surgical Technologies,  
 Denver, CO). Subdermal liposuction is performed fol-  
 lowing the muscular limits using ventX cannulas (Sound  
 Surgical Technologies, Denver, CO). This can produce a  
 better result through a better skin retraction [25,26].

### 37.4 Fat Grafting (Figs. 37.3, 37.4)

Fat is harvested with 4-mm blunt cannula from other  
 sites to an empty sterile bottle trap. One gram of cefa-  
 zoline is added to the trap. Decantation was the only  
 process used to separate the fat cells from the saline



**Fig. 37.4** (a) Preoperative. (b) Postoperative after fat removal in the surrounding area of the breast. Notice the improved shape and the augmentation appearance by subtraction of the fat, no fat

grafting has been performed yet. (c) Axillary approach for fat grafting: pinching the pectoralis muscle in order to differentiate the supramuscular and submuscular layers

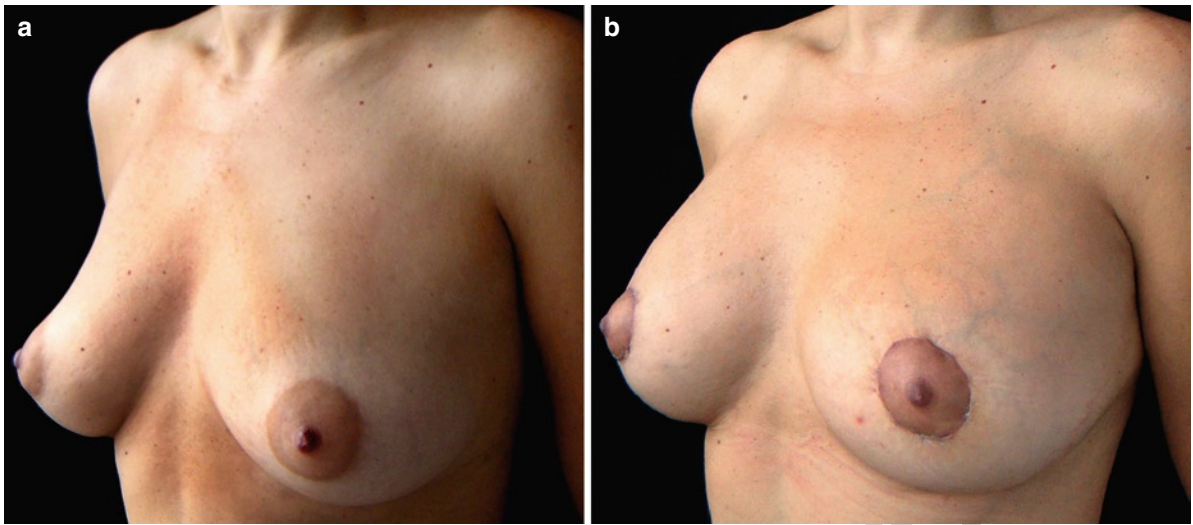
106 and serosanguineous components. In the breast area,  
 107 axillary approach allows fat grafting in the supramus-  
 108 cular and submuscular layers. The average of injec-  
 109 tion is 100–250 mL per side. In the hip region the  
 110 access is made by combining lateral and gluteal fold  
 111 incisions, with an average of 50–150 mL per side.

### 112 37.5 Results

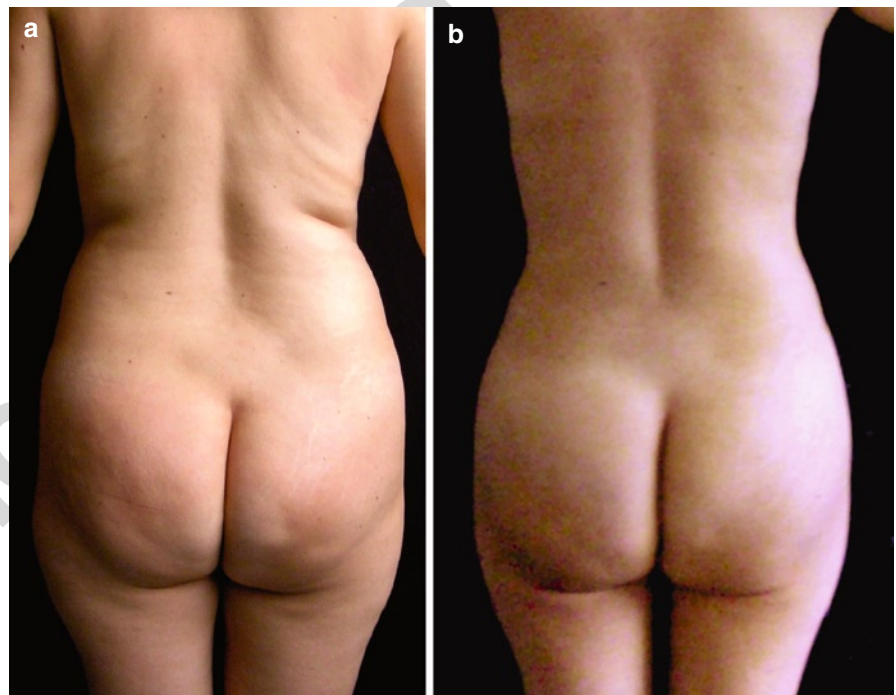
113 The combined multi lamellar lipoplasty plus fat graft-  
 114 ing resulted in safe and effective results (Fig. 37.5)  
 115 Combined fat grafting and extraction is a safe, low cost,  
 116 and effective alternative to implants or liposuction  
 117 alone. In the hip area, the combination of liposuction  
 118 and fat grafting in an anatomical approach led to a more  
 119 feminine shape in most patients (Figs. 37.6–37.10).



**Fig. 37.5** Preoperative *left breast* and postoperative *right breast* showing the combination of fat removal in the lateral portion surrounding the breast and the immediate result after fat grafting. In this patient, periareolar reduction was performed

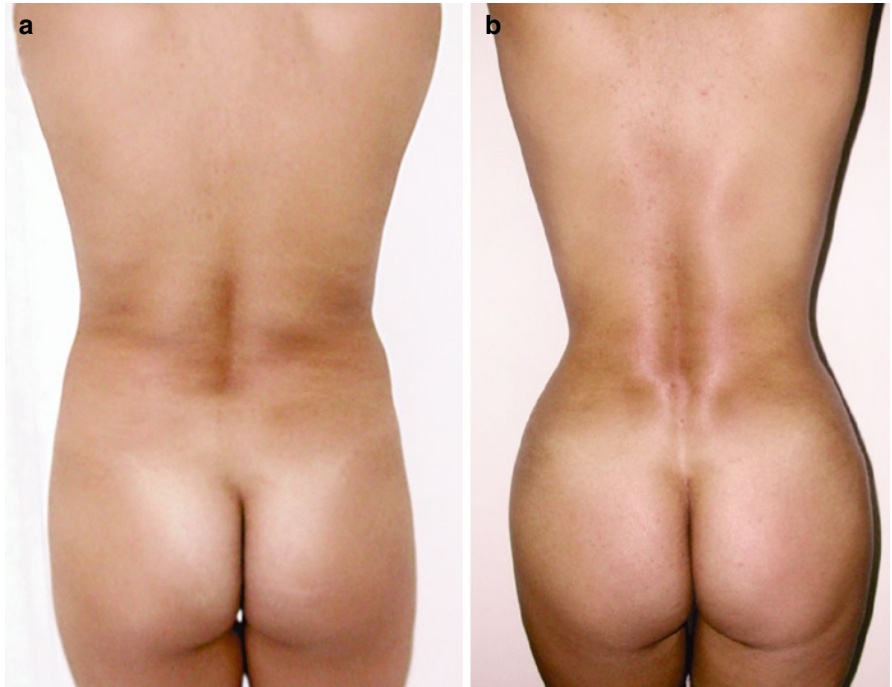


**Fig. 37.6** (a) Preoperative. (b) Six months postoperative after fat liposuction in a “lazy S” and grafting in the breast in anatomical areas, plus fat grafting in the supramuscular and submuscular layers. Periareolar reduction was performed at the same time

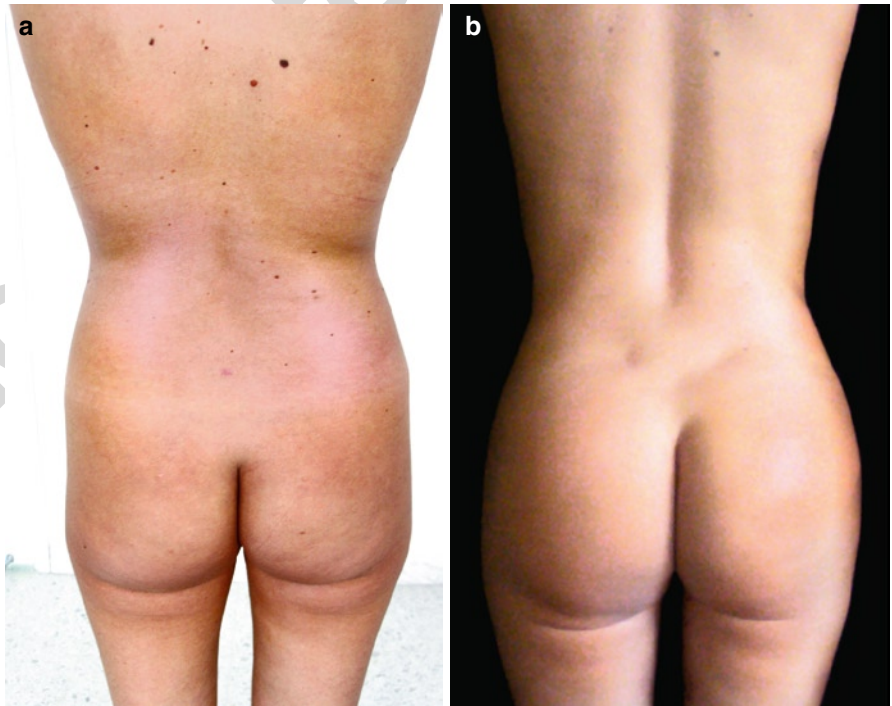


**Fig. 37.7** (a) Preoperative *A shape* in hip-thorax ratio. (b) Postoperative following only liposuction in the waistline and hip areas

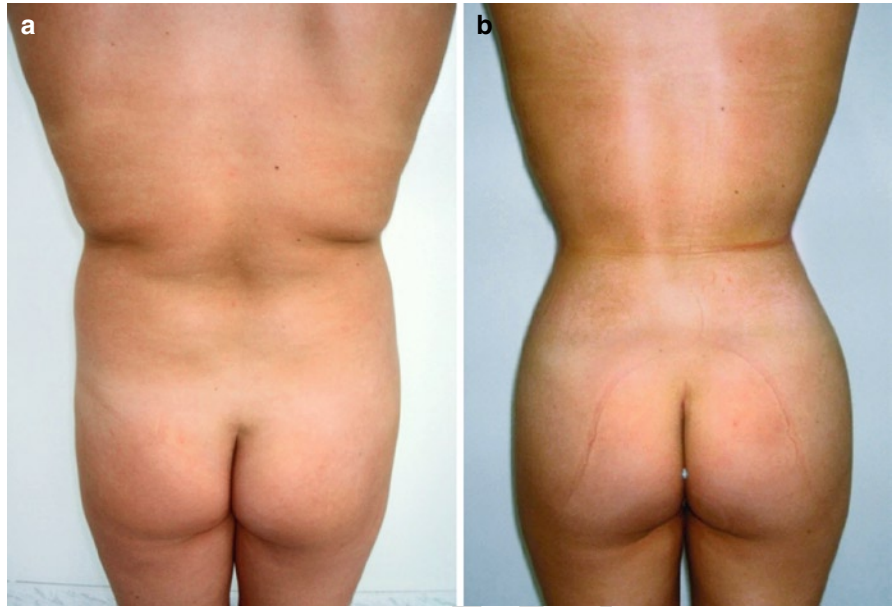
**Fig. 37.8** (a) Preoperative patient with a squared shape in hip-thorax ratio. (b) Postoperative after the combination of fat extraction in the waist line and fat grafting in the hip areas



**Fig. 37.9** (a) Preoperative patient with a V shape in hip-thorax ratio. (b) Postoperative after the combination of fat extraction in the waist line and fat grafting in the hip areas. Additional fat extraction was performed in the thoracic area to create an hour-glass shape



**Fig. 37.10** (a) Preoperative patient with a *V shape* in hip-thorax ratio. (b) Postoperative following the combination of fat extraction in the waist line and fat grafting in the hip areas. Additional fat extraction was performed in the thoracic area to create an hour-glass shape



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