INNOVATIVE TECHNIQUES



EXPERIMENTAL/SPECIAL TOPICS

New Body Contouring Technique in Male: The Muscular Sculpture

C. Monarca · M. I. Rizzo



Received: 20 October 2014/Accepted: 6 January 2015 © Springer Science+Business Media New York and International Society of Aesthetic Plastic Surgery 2015

Abstract Optimal male body contouring considers the entire body and drapes tight skin over the muscles. Males have pride in the appearance of their muscular development. There should be a deliberate effort to achieve an athletic body contour that reveals superficial musculature and selectively highlights adherences. We describe a new technique of male body contouring to achieve tight skin that very well reveals muscular bulk and accentuates adherences; minimal observable scars; a male muscular and athletic body, even for patients who are not, nor have been in the past, bodybuilders. Normal-weight and overweight patients need one operative step, in which the fat is removed and the muscles are sculpted at the same time by using selective liposuction, and if necessary, the fat is repositioned through lipofilling. The ex-obese patients need two operative steps: in the first, we perform abdominoplasty with inguinal scar (to remove the excess abdominal tissue and to lift the pubis) and periareolar scar (to breast lift and reduction); in the second, we sculpt the muscles and the adherences by selective liposuction. In all male patients, the authors strive to achieve a trapezoid chest and sculpted pectoralis major muscle, pronounced alba and semilunar lines, evident muscular bulk, and adherences in both the abdomen and extremities.

Level of Evidence V This journal requires that authors assign a level of evidence to each article. For a full description of these Evidence-Based Medicine ratings,

C. Monarca (⊠) · M. I. Rizzo MS Group, Plastic Reconstructive and Aesthetic Surgery, Via Lago Di Lesina 57, 00199 Rome, Italy e-mail: sculturamuscolare@gmail.com

M. I. Rizzo Advanced Technology in Surgery, Sapienza University, Rome, Italy please refer to the Table of Contents or the online Instructions to Authors www.springer.com/00266.

Introduction

In the last American Association Plastic Surgeon Congress, Hurwitz described body contouring in the muscular male. He stated that optimal male body contouring should consider the entire torso and drape tight skin over welldeveloped muscles through abdominoplasty and multiple oblique ellipses. Bodybuilding males have pride in the appearance of their muscular development. For men there should be a deliberate effort to achieve sweeping tight skin closure that reveals superficial muscular bulk and selectively highlights adherences. For skin to be tightly bound to muscle, the excess needs to be removed both horizontally and vertically [1].

We would like to describe a different technique of male body contouring (muscular sculpture, MS) which we developed to achieve tight skin that very well reveals muscular bulk and highlights adherences; minimal observable scars; a male muscular and athletic body, even for patients who are not, nor have been in the past, bodybuilders.

The MS can be applied to normal-weight patients (Fig. 1), and cases of overweight (Fig. 2) or ex-obese (Fig. 3). In particular, Fig. 2 shows a preoperative case similar to the case of Hurwitz [1] but with different post-operative scars (abdominoplasty with scar in the groin and just periareolar scar) and different body contouring (trapezoid chest, pronounced alba and semilunar lines, sculpted muscular bulk).

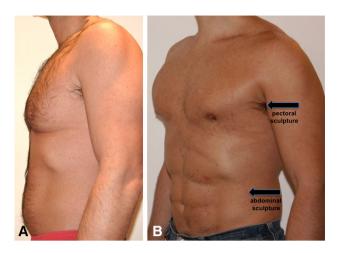


Fig. 1 New male body contouring (muscular sculpture, MS) in normal-weight patient

Surgical Technique

The operation of MS is performed under general anesthesia. After infiltration of saline and adrenaline, we carry out small and inconspicuous access by aggressive liposuction cannulas to create the muscles according to the preoperative plan.

The chest is transformed from round to trapezoid [2], outlining the pectoralis major muscle. If gynecomastia is present, the gland is removed in strips with a small subareolar access [2].

We perform liposuction that closes the skin to the muscle and sculpts the borders of the pectoralis muscle, creating an obtuse angle (between the axilla pillar and the new inframammary fold) that emphasizes the trapezoidal shape, and a new inframammary fold near the areola. The trapezoidal shape (larger side on the top) corrects the gy-noid rounded shape, the gynoid forward projection of the nipple, the gynoid inframammary fold, and the absence of midsternal insertions. The virile inframammary fold is designed close to the areola (0–3 mm) and the nipple-areola complex is adherent to the pectoral muscle and downward orientation (Fig. 1).

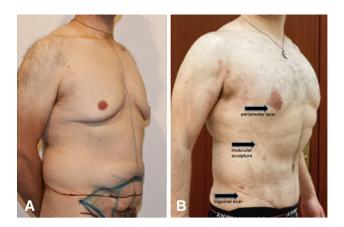


Fig. 3 MS in ex-obese patient

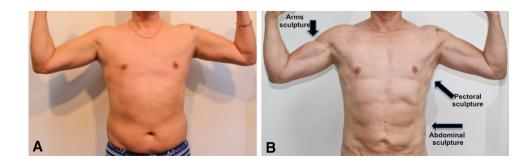
First, careful liposuction removes the adipose tissue, ensuring skin adhesion to the muscular plane. Second, powerful liposuction is performed with basket/accelerator cannulas at the pectoral borders, and at the sternal notch to emphasize the medial insertions. Residual adipose tissue homogenization by cannula avoids irregularity of the treated areas [2].

The abdomen is defined by the deepening of the alba and the semilunar lines, and pulling out the transverse tendinous intersections and muscular adherences; to obtain the six-packs (more or less pronounced, as the patient prefers it), the oblique muscles, and the anterior serratus.

As aforesaid for the chest, after deep liposuction to remove the excess abdominal fat and to ensure tight skin above the muscles, an aggressive cannula is used like a chisel in the subcutaneous tissue for the superficial liposuction. It removes the fat at the level of the tendinous inscriptions, the anatomic lines, the muscular borders, to emphasize the muscle bulk (Figs. 1, 2, 3).

The deltoid and the arm muscles (Fig. 2) and gluteal and lower extremity muscles become evident by using liposuction on the lines drawn in the preoperative plan. The fat is removed and the muscles are sculpted at the same time by using selective liposuction, and if necessary, the fat is repositioned through lipofilling where greater projection is

Fig. 2 MS in overweight patient



FIRMA PAZIENTE

needed. These muscles are part of an athletic appearance. Other superficial muscle bulk of the upper and the lower extremity is highlighted if the patient wants, using the same technique.

Patients must receive anti-thrombotic prophylaxis 1 day before and 1 week after the surgery. In the postoperative period, patients wear an elastocompressive dressing for about 10–15 days.

Normal-weight and overweight patients need one operative step (Figs. 1, 2), in which the fat is removed and the muscles are sculpted at the same time by using selective liposuction, and if necessary, the fat is repositioned through lipofilling.

Ex-obese patients need two operative steps. In the first, we perform abdominoplasty with inguinal scar according to Pontes [3, 4] (to remove the excess abdominal tissue and to lift the pubis) and breast round block with periareolar scar (to breast lift and reduction); we prefer always these techniques because of the less observable scars (Fig. 3). In the second step, we sculpt the muscles and the adherences by selective liposuction (Fig. 3).

In all patients, we strive to achieve a sculpted body, with a trapezoid chest, pronounced alba and semilunar lines, evident muscular bulk and highlighted adherences, both in abdomen and in extremities.

Discussion

Liposuction is a procedure that has emerged over the last 30 years as a method to remove subcutaneous fat for cosmetic purposes. The development of blunt liposuction by Illouz has laid the foundation for remodeling of the silhouette introducing a new era in body contouring by removing and smoothing large amounts of subcutaneous fat for a better contour [5-7].

Nowadays, a growing patient demand for a youthful appearance with a favorable body shape has led to the recent development of new body contouring techniques and surgical devices; however, some devices are time-consuming procedures with a high learning curve, which are appropriate only for highly experienced surgeons [8–12].

Fat is extremely detrimental to health and it creates a disharmonious and more shapeless look both in men and women with an increasing anti-fat prejudice [13, 14].

In men, fat tends to concentrate in the belly; legs and arms get thin; the chest gets gynoid for an excess of fat and/or mammary gland. So, some men have the belly and the pectorals with a feminine aspect [15].

Moreover, people who spend a lot of time at the gym often have an unsatisfactory result to define the abdominals (six-packs). This often leads to personal dissatisfaction and in some very susceptible and predisposed people decreases self-esteem and complicates the relationship with their own body and sometimes with other people.

The aspect that men want is an athletic body. Optimal male body contouring should consider, more than the entire torso [1], the entire body. The MS technique can improve the profiles and the volumes of the body giving it a more proportioned, harmonized, and athletic shape. A similar technique is originally introduced to improve the abdominal muscular profile in body builders.

This technique of abdominal enhancement improved the contour of the abdominal muscles, eliminating fat through selective liposuction [16-18].

The MS, as a modification of this technique of enhancement, has been successfully used in non-body-building patients to create a muscle structure by the repositioning of the subcutaneous fat of the belly, chest/breast, hips, upper and lower limbs.

Notably, MS can define the contour of the pectoral region, of the deltoid, of the abdominal muscles (six-packs and oblique muscles), of the gluteus and the thighs. This is possible through an aggressive selective liposuction.

Traditional liposuction reduces the fat pads and preserves a quantity of subcutaneous fat. It does not improve the whole body but only localized fat and it certainly does not create an athletic build [19, 20]. The MS turns a normal or overweight or ex-obese body to an athletic body, with muscles more or less evident depending on the patients' desire, even if they do not perform physical activity every day.

Conflicts of interest The authors declare that they have no conflicts of interest to disclose.

References

- Hurwitz DJ (2014) Abstract 8: body contouring in the muscular male. Plast Reconstr Surg 133(4 Suppl):977
- Monarca C, Rizzo MI (2013) Gynecomastia: tips and tricksclassification and surgical approach. Plast Reconstr Surg 131(5): 863e–865e
- 3. Pontes R (2005) Addominoplastica Resezione in blocco e sua applicazione nel lifting della coscia e nella torsoplastica. Piccin Ed
- Pontes R (1965) Plastica abdominal: Importância de sua associação à correção das hérnias incisionais. Rev Bras Cir 52:85
- Illouz YG (1985) Surgical remodeling of the silhouette by aspiration lipolysis or selective lipectomy. Aesthetic Plast Surg 9(1):7–21
- Ersek RA, Salisbury AV (1997) Abdominal etching. Aesthet Plast Surg 21(5):328–331
- Hoyos AE, Millard JA (2007) VASER-assisted high-definition liposculpture. Aesthet Surg J 27(6):594–604
- Planas J, Morais BB (1999) New indications in the approach to the pendulous abdomen. Aesthet Plast Surg 23(4):267–270
- 9. Pereira LH, Sterodimas A (2009) Composite body contouring. Aesthet Plast Surg 33(4):616–624

- Shridharani SM, Broyles JM, Matarasso A (2014) Liposuction devices: technology update. Med Devices (Auckl) 7:241–251
- Mann MW, Palm MD, Sengelmann RD (2008) New advances in liposuction technology. Semin Cutan Med Surg 27(1):72–82
- Stephan PJ, Kenkel JM (2010) Updates and advances in liposuction. Aesthet Surg J 30(1):83–97
- Tchkonia T, Thomou T, Zhu Y, Karagiannides I, Pothoulakis C, Jensen MD, Kirkland JL (2013) Mechanisms and metabolic implications of regional differences among fat depots. Cell Metab 17(5):644–656
- O'Brien KS, Daníelsdóttir S, Ólafsson RP, Hansdóttir I, Fridjónsdóttir TG, Jónsdóttir H (2013) The relationship between physical appearance concerns, disgust, and anti-fat prejudice. Body Image 10(4):619–623
- Narula HS, Carlson HE (2014) Gynaecomastia-pathophysiology, diagnosis and treatment. Nat Rev Endocrinol 10(11):684–698

- Mentz HA 3rd, Gilliland MD, Patronella CK (1993) Abdominal etching: differential liposuction to detail abdominal musculature. Aesthet Plast Surg 17(4):287–290
- Gilliland MD (1993) Abdominal etching: differential liposuction details abdominal musculature. In: 12th Congressional Meeting of the International Society of Aesthetic Plastic Surgery. Paris, France, September
- Gilliland MD (1993) Abdominal etching: utilizing differential liposuction for detailed skin retraction. In: 11th Annual Meeting of the Lipoplasty Society of North America. New Orleans, Louisiana, September
- Troilius C (1996) Ten year evolution of liposuction. Aesthet Plast Surg 20(3):201–206
- 20. Kesselring UK (1984) Body contouring with suction lipectomy. Clin Plast Surg 11(3):393–408

FIRMA PAZIENTE