Megaliposculpture and Therapeutic Megaliposculpture

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22.1 Introduction

Ten years ago, we proposed the name “megaliposculpture” for all liposculpture procedures during which is extracted 10 l or more of a mixture composed of the adipose tissue, the normal saline from the subcutaneous infiltration and the patient’s blood. The proportions of each of these elements vary according to the case, and only the quantity of adipose tissue will be taken into consideration.

The evaluation at the time of the hemoextraction, the visible fraction of blood loss that determines whether to proceed with or abandon the intervention, is of such importance that it is necessary to keep a close watch over this parameter. Its qualitative and quantitative importance determines the volume of pure lipoextraction.

At the time of his initial demonstration in Paris in March 1977 at the Muette Clinic, Giorgio Fischer, father of this technique, declared before the observing surgeons that lipoextraction (the name given to this operation at the time) was not a treatment for obesity, and he had conceived this technique, since he was himself a cosmetic surgeon, solely as a part of the cosmetic surgeon’s armamentarium to treat only localized adipose parts of the body. He offered to his colleagues, pure cosmetic surgeons, a closed operation that eliminated the dermolipectomies (proposed by Ivo Pitanguy) in many cases, thus making it a preferred procedure.

The closed technique of lipoextraction avoided the long scars and, at the same time, transformed dermolipectomy (a procedure equally designed to modify the shape of the body and not excess weight) into a procedure of lesser importance. Nevertheless, the idea readily occurred to everyone, both surgeons and patients, to use this procedure to treat obesity and to think about extracting large quantities of adipose tissue, even if this treatment concept only dealt with the consequence of being overweight, and not the cause of obesity itself.

This concept of Giorgio Fischer, creator of the technique, and the conditions in which the procedure took place at the time (hospitalization, frequently general anesthesia, the use of large cannulas and machine, the absence of infiltration – “dry technique” or infiltration without adrenaline, a large number of blood transfusions, sometimes laborious fluid and electrolyte balance, hypovolemic shock, long convalescence, lack of practice by surgeons, complications or unsatisfactory results, lack of procedure updates) made surgeons fear that a lipoextraction of more than 2 l was the cause of the difficulties of resuscitation and of more frequent and more serious problems. The taboo of 2 or 2.5 l arose from this fact, and the extractions of 5–6 l from time to time were considered to be exceptional.

Little by little, the quantity of adipose tissue extracted increased, when it was certain that large extractions would not pose any additional risk to patients who were candidates for such operations. With Nestor Asure as my assistant, we first practiced megaliposculptures in two stages at 6-month intervals: 8 l was extracted from the lower extremities during the first stage, and 6 months later 6–8 l from the abdominal wall.

After the cap of 8 l, corresponding to 6 l of pure adipose tissue, we reached the limit of 10 l for a large number of patients, then that of 12 l, then 14 l, then 16 l, then 18 l, then 20 l and so on, until a maximum of 23 l, corresponding to about 17 l of pure adipose tissue.

This quantitative work was spread out over 10 years and it was found to be greatly stimulated by identical work performed almost simultaneously by our colleague M. Eed in Saudi Arabia and A. Fikioris and G. Ioannidis in Greece, who treated similar cases to ours and used the same technique. In this way, little by little, the taboo of 2.5 l was destroyed and was replaced by confidence in megaliposculpture. This must only be performed by a surgeon trained in megaliposculpture, selection of patients must be carefully done, and the anesthesiologist must be trained for operations on obese persons, and must work in coordination with the surgeon and his team. Both the anesthesiologist and the surgeon must each know when to stop before going too far, and never pose greater risks to the patient than would be possible during the course of a standard liposculpture.

More than 800 cases have been operated upon to this day without mortality by the following surgeons who currently practice this operation: Drs. Eed, world lead-
er in this kind of surgery, Fikioris and Ioannidis; and all those who followed us: Carson Lewis in California, Giorgio Fischer in Rome, Furio Ferrari in Torino, Yelda Felicio in Brazil, Louis Madgdi Fanous in Abu Dhabi, Cesar Morillas in Peru, Hernandez Perez in El Salvador, Eduardo Krulig in Venezuela, and Louis Benelli in Paris. This permits us to be optimistic even if, sooner or later, as in any surgical operation, a serious complication should arise.

22.2 Why Perform Megaliposculpture?

Failures in current medical or surgical therapies for the obese justify megaliposculpture. Although the cause itself of the obesity is not treated by this megalipoextraction of adipose cells, the target is reached, but only in part, since lipectomy is only concerned with superficial excess and not the deeper excess of adipose tissue.

A certain part of hypertrophied or hyperplaised adipose cells are definitively removed from the catastrophic influence of the cause of the obesity. In this way, one can expect an improvement in the physical condition of the patient while provoking disturbances in the generative process of the obesity. One could compare this disease, obesity, to a war in which there is one enemy and several victims. If a counterstroke leading to victory is not possible, the first thing to do is to protect the victims, or at least, in the case of obesity, to shield them from the catastrophic action of this cause.

In this way, one can expect that the lesser the quantity of vulnerable tissue subjected to the disastrous cause, the better the body can fight against this biologic and metabolic anomaly. This attempt to reduce the vulnerable tissue territory can expect the attenuation of potential life-threatening consequences of obesity.

It is well known that obesity can cause or aggravate cardiac diseases, high blood pressure and stroke, pulmonary diseases, diabetes, gallbladder disease, gout, certain cancers, osteoarthritis of weight-bearing joints, an abnormal level of lipids and plasma lipoproteins, and irregularity of the menstrual cycle. Obesity is often an enormous psychological burden. When all the conventional treatments have failed, megalipoextraction is the last operation to perform. It should be regarded as a major lifesaving operation and not as an esthetic procedure.

The goal of megaliposculpture or therapeutic megalipoextraction is:

1. To extract in a single operation the greatest possible quantity of subcutaneous adipose tissue for the patient, without running a greater risk than in the course of a normal liposculpture, and without needing to perform any type of blood transfusion (autologous or not): the result of this operation is a numerical reduction of the subcutaneous adipose cells.

2. To provoke biological metabolic or psychological modifications in the operated patient, who, following a diet, exercise, or medical treatment, will result in decreasing the intra-abdominal and intra-muscular adipose tissue, residual components of the excess adipose tissue. The result of these post-operative biological modifications is a reduction in the volume of the adipose cells in these two areas where a mechanical reduction is impossible to perform.

22.3 Indications

Megaliposculpture is a major operation that can produce serious complications and is selected only after thorough reflection by both patient and surgeon. Potential patients are failures of other medical or surgical treatments. The patient must be informed of the risks and is asked to reflect for a period of time.

In the beginning, we operated on patients weighing between 100 and 150 kg with no co-morbidities, e.g., high blood pressure, cardiac or pulmonary problems, or diabetes. Eventually we operated on patients over 150 kg, the heaviest patient weighing 210 kg. It was his insistence that made us decide to operate. The ideal patient does not exceed 100 kg; it is with them that one achieves the best results.

At the present time, we accept, with the agreement of our anesthesiologist, certain obese patients who also have high blood pressure, cardiac, pulmonary, or diabetic problems, if the risk does not appear to be too great.

Our results indicate that megaliposculpture will not bring a solution but an additional treatment for people with obesity, high blood pressure, certain cardiac or pulmonary problems, and other problems associated with obesity. In certain cases of ambulatory difficulties, in cases of vertebral osteoarthritis or arthritis of the hip, an abdominal megaliposculpture can reduce chronic vertebral pain, chronic pain in the hips or knees, or, as orthopedic surgeons have suggested, it might prolong the life of hip prostheses by removing the excess weight.

Having obtained positive results, we became more and more venturesome in the operative indications. We are convinced that the megaliposculpture has a place in the treatment of obesities, whether general or regional.

Infecing sterile air with a 60cc syringe after taping as suggested by Mel Shiffman shorten considerably this complication.