

JOURNAL OF ESTHETIC MEDICINE & SURGERY

September 1996

Vol. 23 - No. 91

*The Utilization of LPG Technique during Liposuction
(185 Cases Studied)*

by

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Introduction

More and more patients want esthetic surgery, and this is stimulating physicians to come up with newer and better techniques.

During the past two years we've seen a flood of information in the media about Ultra-Sonic liposuction, a technique started by Dr. Zocchi. However, this procedure has not developed as well as it was hoped. Nor has it revolutionized liposuction as was announced; as evidenced particularly by those patients that experienced burn complications.

The latest technique is "superficial liposuction," in which Dr. Gasparotti is the leader (the Italians have always been ingenious about promoting new methods).

These innovations are the result of listening to patients who are no longer satisfied with the type of body contouring to be had with classic liposuction, but who also demand an improvement in the appearance of the skin and superficial tissues, particularly in the elimination of hyperplastic fat cells that cause the unaesthetic "orange peel" effect.

Furthermore, the famous "taboo zones," well described by Dr. Illouz ten years ago, are disappearing one after another, leaving the way clear for liposuction procedures in every part of the body without restrictions.

Without restrictions, certainly, but not without aesthetic risks for some of them, and for that reason it's important to remember that even the use of super-fine and ultra-sophisticated canulas is not completely risk-free on the front of a thigh or on a calf.

It is with these concerns in mind that we have begun using the LPG System to complete "risky" liposuction procedures.

Description of the Apparatus

The LPG system is a massage machine that utilizes a skin-rolling technique and mobile, variable-power aspiration.

The apparatus consists of:

- a closed body containing a vacuum pump that creates the aspiration
- a treatment head composed of a massage chamber and a handle equipped with a dual-action trigger controlling the aspiration and the direction of treatment. The massage chamber is composed of two motorized rollers that allow a skin fold to be formed by the aspiration and then be moved by the rollers.
- four lateral and two longitudinal valves to assure an airtight chamber

It is possible to regulate:

- the space between the rollers to adjust for the thickness of the skin fold
- the aspiration power

This technique is patented world-wide.

It provokes the following physiological actions:

Hypervascularization and hyperoxygenation

The massage revives cutaneous vascularization, opening up metabolic exchange and cellular nutrition.

The elimination of waste products is accelerated, allowing decongestion of tissues.

Breaking up and softening of tissues

The reviving of cutaneous vascularization permits restructuring of connective tissue.

Drainage of interstitial and lymph fluids

The preceding actions allow bodily fluids (blood, lymph, interstitial fluids . . .) to better transport nutrients and drain toxins.

Toning

The stimulation of elastin fibers gives back a real elasticity to the skin.

Myofascial release

The aspiration permits a loosening and release of the cutaneous layer from the muscular sheath below.

This apparatus has been used for several years during plastic surgery operations to prepare the tissues, to drain standing fluids, and, if necessary, to tone muscle layers; and

post-operatively to help with scarring, lighten or completely avoid adherences, and eliminate hematomas.

Doctor Vergereau has used the apparatus since 1987 post-operatively when liposuction results are irregular. He published a paper on this technique in the Journal of Aesthetic Medicine in March 1995.

An instrumental scientific study on this new method of treating cellulite was conducted at the Dermatology Laboratory at the Hotel-Dieu in Marseilles by professors Marchand and Privat.

Measures used: Photogrametry sensitive enough to validate the study.

As for me, after owning the machine for two years and using it to treat complications after certain delicate liposuction procedures, I formed the idea to use it pre-operatively as well.

I established proof of obtaining a mechanical fat break-down, that is a crushing of superficial fatty cells, after a liposuction. This method henceforth allowed me to perform liposuctions on every part of the body, no matter what the skin condition, and to be sure of obtaining satisfying results.

Operating Technique

First, a classic liposuction is performed under local anesthesia, with a light pain killing drug administered as well.

Since the purpose of the study is to work on "risky" zones, the liposuction is performed with canulas 2.5 to 4 mm in diameter maximum, with numerous precautions, on a superficial fat layer of 1.5 cm.

Afterwards, the openings are closed up water-tight again at two points.

The treated area is immediately protected by a very fine adhesive sterile gauze.

Then the second part of the operation can begin. This consists of an intervention on the superficial fat layer that has been left intact during the liposuction. The motorized main head off the LPG systems apparatus is passed back and forth twenty times over each treated zone at a maximum aspiration power (9) corresponding to 500 millibars

One clearly feels the crushing of large subcutaneous fat cells, and the visible dispersal of the "orange peel" created by these cells.

At the end of the treatment, the incision points are reopened to permit the evacuation of serum and of crushed fat cells.

A thick compressive bandage is applied to limit post-operative edema.

Protocol

Our experience was gathered over two years, using this procedure on 185 liposuction patients in high-risk areas of the body:

- 41 anterior surface of the thighs
- 22 calves
- 44 saddlebags and external thighs with loose, poor-quality skin
- 40 inner thighs and knees with the same type of skin
- 23 faces (double chins and heavy jowls)
- 15 rolls of thoracic fat and posterior surfaces of the arms

The results on 185 patients have always been very satisfying.

Conclusion

We think that the combination of the LPG technique and classic liposuction represents real progress for the treatment of superficial cellulite in “orange peel skin.”

This innovative technique is catalogued in the body of research work concerning superficial liposuction, which is very popular right now.

It poses absolutely no danger, in contrast to the ultra-sound technique.

Learning the technique is relatively easy and its results are quite convincing.