

# Liposuction: The New Techniques Pros and Cons

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Liposuction, which has been performed in this country for more than 25 years, is one of plastic surgery's most popular procedures and for excellent reason. Traditional liposuction is among the safest surgical procedures that exist. It has very low risk of complications if it is performed on a patient who is close to his or her ideal weight and it has yielded excellent aesthetic results for many.



Although there have been some modification during the years, the procedure hasn't seen much change from the original technique until now. Recently, there have been a slew of new developments that claim to improve the standard version of liposuction. But are these new techniques better than the original? Are they safer or cosmetically superior?

To find out, Dr. Andrew Kleinman, has reviewed the last techniques and provides a guideline to explain the pros and cons of each procedure. He has successfully been performing liposuction since it was first introduced into the United States for 25 years .

## **The New Technique: Vaser**

What it is: Ultrasonic-assisted liposuction

Ultrasonic liposuction has been performed for more than a decade and uses ultrasound waves to "liquefy fat" prior to the fat being removed by suction. For most areas of the body, the results are similar to the results of traditional liposuction, but in certain areas where the fat is especially fibrous, for example the upper back, ultrasonic liposuction can sometimes give an improved result. Unfortunately, ultrasonic liposuction has had a higher rate of complications than traditional liposuction, including an increased rate of numbness and potential scarring of the skin, and for the past several years, the number of procedures being done using this technique has decreased.

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There is a technique called "Vaser" that is being advertised as a newer, safer form of ultrasound technology, with advertised benefits including low to minimal pain and bruising. Since traditional liposuction using the current technique already results in a fairly low incidence of pain and bruising, it is not clear the Vaser is a substantial improvement. Since the technology is expensive, it does result in an increased cost of the procedure.

## **The New Technique: Smart Lipo**

What it is: Laser-assisted liposuction

Another technology that has been advertised heavily is laser liposuction, also called "Smart Lipo". The theory of the benefit of laser liposuction is that the laser can potentially cause the skin to shrink after the fat is removed. In

addition, the laser is said to liquefy the fat. I recently went to a course on laser liposuction, and the teaching was that the laser heated up the skin to cause it to shrink. The plastic surgeon giving the course used a temperature probe to very carefully monitor the skin temperature. If the temperature became too hot, it could cause burning and scarring of the skin. If the temperature was not hot enough, it appeared to have little to no benefit on the skin. In any case, the amount of shrinkage of the skin appeared to be minimal. In addition, the risk of complications with a laser is most likely higher than it is with using traditional liposuction because if you're using a laser you have the additional potential risk. Again the manufacturer claims that the bruising and scarring are decreased. This technique has recently appeared frequently on television and in magazines due to a very heavy marketing campaign. Unfortunately, as of yet, there are no accepted double-blind studies demonstrating that Smart Lipo has any significant advantage over traditional liposuction.

### **The New Technique: Lipodissolve**

What it is: Injections of fat-dissolving substances

Lipodissolve is another technique that is being advertised extensively. It is a controversial cosmetic procedure in which various non-FDA approved drug mixtures are used usually with phosphatidylcholine, a chemical that has not been approved for any fat-dissolving injectable use in the U.S. Three medical associations have issued health warnings cautioning against the use of injection lipolysis, including the American Society of Plastic Surgeons, the American Society of Aesthetic Plastic Surgery, and the American Society of Dermatologic Surgery. Similar warnings have been issued in England and Canada. ANVISA, the governmental body regulating the manufacturer and commercialization of drugs in Brazil, banned the manufacturer, use, and sale of injection lipolysis agents using phosphatidylcholine. In September, the FDA issued the following statement: "We are aware of the practice of using Lipodissolve and are investigating and evaluating. It is not FDA approved. In fact, there are no FDA-approved drugs with an approved indication to dissolve fat and FDA cannot assure the safety and efficacy of these types of drugs. Consumers need to know that this is a buyer-beware situation. These are unapproved drugs for unapproved uses and we can't guarantee consumers' safety."

In spite of these warnings, Lipodissolve is currently being performed by many physicians in the United States. There currently are clinical trials being performed in a number of locations in the United States under research protocols to see if this technique is effective and safe. Most physicians recommend waiting until the results of these trials are reported before having this procedure. There are many reports of complications, including scarring and skin irregularities. In summary, according to Dr. Kleinman, although some of the newer techniques may represent advances in liposuction for specific situations, none of them has yet been proven to be a major improvement over more traditional techniques. As with all procedures, the training, skill and experience of the surgeon is still the most important factor. When evaluating the surgeon, ask whether he or she is board-certified and by which board. Also ask if that board is recognized by the American Board of Medical Specialties. When exploring a new procedure, ask the physician how long he's been doing this procedure and how many he has done. And when evaluating any new medical device, remember the old saying "When you have a hammer, the entire world looks like a nail".

### ***Coming Soon to a Doctor's Office Near You!!!***

A very interesting new technique that is not yet approved by the FDA is Ultrashape. This technique uses external ultrasound without the need for an incision. Using a transducer on the skin, focused ultrasound energy is delivered to the subcutaneous fat. This causes a disruption of fat cells while theoretically leaving the surrounding tissues unharmed. The fat from these cells is then handled by the body the same way that fat derived from a meal is handled by the body.

An important feature of the **Ultrashape** procedure is a computerized tracking and guidance system. This causes the fat disruption to be done in a uniform fashion so there are not irregularities following the procedure. This

procedure is now approved in 48 countries and has been performed on thousands of patients. The results appear to be somewhat encouraging, but the amount of improvement is less than with traditional liposuction. This procedure can be done two or three times on the same area, thereby improving the overall results. This appears to be potentially a good solution for people with modest areas of excess fat who do not wish to have the recovery of surgery. It is most likely that larger deposits of fat will continue to require removal with surgical forms of liposuction.

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