

## **Ultrasound Assisted Lipoplasty If You're Considering UAL...**

Ultrasound-assisted lipoplasty, commonly known as "UAL," is a relatively new liposuction technique that uses sound waves to "liquefy" unwanted fat. Although it is not a substitute for traditional liposuction, UAL can be an effective tool for removing fat from fibrous body areas, such as the male breasts or the back, or for removing larger volumes of fat in a single procedure.

Often, traditional liposuction is performed with UAL to help shape UAL-treated areas or to treat areas of the body not suited for UAL, such as the neck and inner thighs.

If you are considering UAL, this brochure will provide an overview of the technique: when it can help, how it is performed and what results you can expect. It can't answer all of your questions, since a lot depends on your individual circumstances. Ultimately, you and your plastic surgeon will determine whether UAL or traditional liposuction is best suited for you.

Please ask your physician if there is anything about the procedure you don't understand.

### **The Best Candidates for UAL**

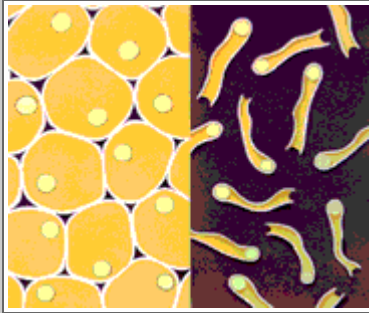
Liposuction can enhance your appearance and your self confidence, but it won't necessarily change your looks to match your ideal, or cause other people to treat you differently. Before you decide to have UAL or liposuction of any type, think carefully about your expectations and discuss them with your surgeon.

The best candidates for UAL are generally no different than candidates for the traditional liposuction procedure: normal-weight people with firm, elastic skin who have pockets of excess fat in particular areas. UAL candidates should be physically healthy, psychologically stable and realistic in their expectations. Age is usually not a criterion for liposuction, but older patients may have diminished skin elasticity and may not achieve the same results as a younger patient.

### **All Surgery Carries Some Uncertainty and Risk**

Since it was first described in the medical literature in 1991, UAL has been performed on several thousand patients worldwide. However, long-term effects of ultrasound energy are not known and extensive research and clinical trials are needed to establish fully the safety and efficacy of UAL. So far, clinical investigators have reported good results from the technique.

UAL is normally safe when patients are carefully selected, the operating facility is properly equipped and the physician has completed an appropriate, hands-on UAL training course.



*Fat cells, pictured at left, appear balloon-like. When ultrasonic energy is applied, the cell walls break down, allowing fat to flow out of each cell.*

As with traditional liposuction, serious medical complications from UAL are infrequent. However, possible complications include clots that block blood flow, infection, excessive fluid loss that can lead to shock, excessive fluid accumulation that must be drained, skin injury, perforation injury to the skin or other organs and adverse reactions to anesthesia.

One potential complication specifically related to the UAL technique is thermal skin injury or burn caused by the heat from the ultrasound device. Also, temporary collections of fluid beneath the skin surface (seromas) are more common with UAL.

Also, you should be aware that at present, the tube-like instruments or cannulas used to perform UAL are slightly larger than the cannulas used for traditional liposuction. The longer incisions that are needed for UAL require that they be placed carefully in hidden areas. For this reason, some surgeons prefer to use the traditional liposuction technique in areas where an obvious scar may result.

Cosmetic complications from all types of liposuction include: irregularities of the skin's surface, areas of uneven pigmentation, and asymmetry. Some cosmetic problems can be treated with additional surgery.

### **Planning Your Surgery**

In your initial consultation, your surgeon will evaluate your health, determine where your fat deposits lie and assess the condition of your skin. Your surgeon will explain the body contouring methods that may be most appropriate for you. For example, you may learn that an abdominoplasty or "tummy tuck" may more effectively meet your goals; or that a combination of traditional liposuction and UAL would be the best choice for you.



*Healthy, normal-weight people with elastic skin and pockets of excess fat are good candidates for surgery.*

Be frank in discussing your expectations with your surgeon. Also, be sure to tell your physician about any significant weight losses or gains you have had at any time. You should inform your surgeon if you smoke, and if you're taking any medications, vitamins or other drugs.

### **Preparing for Your Surgery**

Your surgeon will give you specific instructions on how to prepare for surgery, including guidelines on eating and drinking, smoking, and taking or avoiding vitamins, iron tablets and certain medications. If you develop a cold or an infection of any kind, especially a skin infection, your procedure may have to be postponed.

While you are making preparations, be sure to arrange for someone to drive you home after your surgery and, if needed, to help you out for a day or two.

### **Where Your Surgery Will Be Performed**

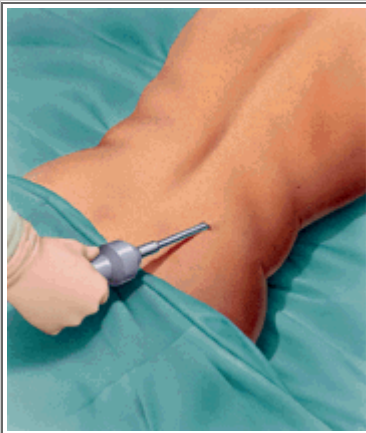
UAL may be performed in a surgeon's office-based facility, an outpatient surgery center, or a hospital. It is usually done on an outpatient basis. If a large volume of fat will be removed, a stay in a hospital or overnight nursing facility may be required.

### **Anesthesia for UAL**

If you are having only a small amount of fat removed, UAL may be performed under local anesthesia combined with a sedative to make you drowsy. You will be awake but relaxed and feel only minimal discomfort. Some surgeons may prefer to use an epidural block, similar to the anesthesia commonly used in childbirth.

General anesthesia may be used if you prefer it, or if your doctor so advises. In that case, you will sleep through the procedure.

### **The Surgery**



*The cannula connected to the ultrasound generator is inserted to "liquify" the excess fat before it is removed with vacuum pressure.*

The time required to perform UAL may vary considerably, depending on the amount of work you are having done. However, UAL generally takes longer than traditional liposuction because of the extra "fat-liquefying" step involved.

To begin the procedure, salt water containing local anesthesia and adrenaline is injected into the area to be treated. Then, a metal cannula connected to an ultrasound generator is inserted beneath the skin through a small incision. The ultrasonic energy causes the walls of the fat cells to break down, allowing the fat to flow out of each cell. The "liquified" fat combines with the injected fluid to create an emulsion, which is removed from the body by vacuum pressure.

If you are awake, you may feel some warmth and vibration during the procedure. You will probably be given some fluid through an IV (intravenous) tube to keep your fluid level balanced. Typically, only a small

amount of blood is lost during UAL. However, if your surgeon determines that a blood transfusion may be needed, you can donate your own blood in advance of the procedure.

### **After Your Surgery**

After surgery, you will likely experience some fluid drainage from the incisions. A drainage tube may be inserted beneath the skin to prevent fluid build-up. To help control swelling, you may be fitted with a snug elastic bandage or compression

garment to wear over the treated area. The bandage or garment is typically worn for up to four weeks, to help your skin shrink to fit its new contour.

The side-effects of traditional liposuction surgery - pain, burning, swelling, bleeding and temporary numbness — can be expected from UAL as well. The pain can be controlled with medications prescribed by your surgeon, though you may still feel stiff and sore for a few days.

It is normal to feel a bit depressed in the days or weeks following surgery. This feeling will subside as you begin to look and feel better.

### **Getting Back to Normal**

Healing is a gradual process. Your surgeon will probably tell you to start walking around as soon as possible. You will begin to feel better after about a week and you should be back to work within two weeks following your surgery. Any stitches are usually removed within the first week.

Activity that is more strenuous should be avoided for about three weeks as your body continues to heal. Although most of the bruising and swelling usually disappears within six weeks, some swelling may remain for six months or more.

Your surgeon will schedule follow-up visits to monitor your progress and to see if any additional procedures are needed.

### **Your New Look**

You will see a noticeable difference in the shape of your body quite soon after surgery. However, improvement will become even more apparent after about six weeks, when most of the swelling has subsided.

If your expectations are realistic, you will probably be very pleased with the results of your surgery. You may find that you are more comfortable in a wide variety of clothes and more at ease with your body. And, by eating a healthy diet and getting regular exercise, you can help to maintain your new shape permanently.



*Improvement will become apparent after about six weeks, when most of the swelling has subsided.*



This symbol designates surgeons who are active members of the American Society of Plastic Surgeons. They are certified in the specialty of plastic surgery by the American Board of Plastic Surgery and are dedicated to the highest standards of patient welfare and surgical excellence.

© Copyright American Society of Plastic Surgeons