

Beauty's Best PAL

Power assisted liposuction is one of the newest advances in this widely used procedure. **Jodi Thiessen** spoke with surgeons on both coasts, who have been using this popular technique of fat removal since it's inception.

Liposuction is a popular method of removing stubborn pockets of fat and sculpting the form so that it is in better proportion and balance. There have been several major advances in the procedure, all having an impact on the final result. One of the latest advances is Power Assisted Liposuction (PAL), which uses a motorized cannula to remove the unwanted fat.

Los Angeles plastic surgeon David H. Stoker, MD, has been using PAL exclusively for several years and explains: "Power assisted liposuction is one of the newest and most important advances in body sculpting. PAL involves a cannula that vibrates rapidly in the tissues to suction the unwanted fat. The vibration helps to shake the fat loose in clusters of cells making it a very gentle way of removing fat."

To understand why it is more efficient and gentler on the patient, the conventional method of liposuction must also be understood. Traditionally, cannulas are powered only by the surgeon's hand and arm, requiring large, rigorous movements to remove the fat. Manhattan plastic surgeon Gerald H. Pitman, MD, explains: "The way liposuction works is the surgeon inserts a tube into the fat that is attached to a vacuum. In order to get the fat out the surgeon has to thrust the tube back and forth rapidly. The nature of that movement is necessarily a little rough and the surgeon is limited just by the way the human body works — the length of the stroke and the force that is used is much more limited than with a powered instrument."

Because the PAL cannula vibrates it creates very little disruption to the surrounding tissues and blood vessels, safely removing the fat.

The vibration is at a width of 2mm and a speed of 4,000 cycles per minute. Dr. Stoker likens the procedure to shaking the ripe fruit from a tree: "Ripe fruit can be shaken loose but the tree remains intact."

The other advantages are directly for the surgeon and indirectly for the patient. "It reduces the surgeon's work effort," explains Dr. Pitman. "The surgeon can do a case without getting fatigued, allowing greater concentration on the sculptural aspects rather than the hard mechanical work of pulling the fat out."

Dr. Stoker agrees: "It is a benefit for the surgeon to have a cannula to do most of the work because it allows the surgeon to direct more attention towards the sculpting aspect of it. In turn the benefits to the patients are quite substantial."

Also because PAL takes less time, the patient spends less time anesthetized. Depending on the amount of fat removed, a local anesthetic with sedation may be sufficient. This allows for pain relief and the patient is unable to remember the procedure. The ideal candidates are those with localized fat deposits. "Although we may treat many different areas, usually we remove smaller

Possible Benefits of Power Assisted Liposuction

- Efficient removal of fat
- Less operative time
- Less anesthesia time
- Less disruption to surrounding tissue
- Less recovery time
- Greater ability to sculpt the form

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amounts," says Dr. Stoker. "I also personally feel more comfortable treating older patients with PAL. Older patients' tissues can be more fragile and they can bruise more easily. By using a less traumatic technique it's beneficial to all, but especially for older patients."

Because PAL is so efficient at removing the fat, very tiny cannulas can be used. These are more precise and less likely to leave contour irregularities. They require smaller access incisions in the skin and can be used more superficially allowing for greater skin retraction. The instrumentation for the PAL comes in various sizes. 4-5mm cannulas are used for the deeper fat layers while 2-3mm cannulas for the superficial fat layers.

Most patients require a week off work but, according to Dr. Stoker, there's less discomfort, less bruising and less swelling. "All of the risks

and complications are the same with PAL as with previous liposuction techniques but I find they occur less frequently," explains Dr. Stoker.

Dr. Pitman advises patients against simply seeking out a surgeon who uses PAL. "Having used PAL, ultrasound and conventional methods of liposuction, I know I can get equivalent results with each of them," says Dr. Pitman. "I choose to use a modality that to me is the most efficient, safest, predictable and reliable. The message should be to go find a good surgeon and trust them to use the instrumentation that gets the best and safest results." For Dr. Stoker, the PAL instrument is his preferred methodology for getting the best results in liposuction. "It's a more efficient and safer method of permanently removing unwanted fatty bulges creating more attractive body contours." **AA&CSM**