New Technologies in Lipoplasty (April 1st, 2010) – Additional Comments

Joseph P. Hunstad
I would like to address a question that was never answered on the webinar: Can you address the cost and potential reimbursement of one of the new laser technologies?
- The cost of a lipo device is considerable; however, the interest shown by the patients is also very significant. Because of the expense of the device, we added a $500 surcharge to these procedures and over the course of one year it has generated enough revenue to cover the cost of the device. This is not to say that this device serves only as a promotional marketing tool, rather the benefits of the device are realized by the patients who are willing to pay the surcharge without any resistance. We continue to employ the surcharge to cover any extra expenses and maintain the revenue stream for the practice.

Gordon H. Sasaki, MD
Addressing some unanswered questions:

#1 Phosphatidylcholine (Lipodissolve) has not been demonstrated to provide any significant benefit to improve fatty deposits in either transcutaneous or infiltrative methods. In fact the active agent in mesotherapy probably is not phosphatidylcholine but the detergent bile salts. There have been no peer-review articles on Lipodissolve. My bias is to refrain from getting involved in this technique that requires multiple injections adding to the risk:benefit ratio for our patients.

#2 External ultrasound has been used to reduce small volumes of fat. Unfortunately, these devices have not received FDA-clearance. Their platforms may be large and their effects modest that require a number of sessions to see a meaningful result. There are 2nd generation devices being developed that may be more effective and less costly that can fit into plastic surgeons’ practices as an adjunctive procedure to complement internal liposuction results.

#3 There have been no significant changes required in the tumescent solutions. One uses either Ringer’s Lactate with epinephrine (0.25-1.0mg/liter RL) and lidocaine(250-500mg/liter RL) or Normal Saline with epinephrine (0.25-1.0mg/L NS, lidocaine (250-500mg/liter NS, and sodium bicarbonate to reduce the stinging effect of a acidic pH. For patients sensitive to epinephrine and lidocaine, subsequent tumescent solutions may be used without them. For safety reasons, a superwet technique of 1-1.5:1 ratio (1 liter in of tumescent solution to 1-1.5 liter of aspirate) is recommended. In cases of large volume suctioning (greater than 5000ml of aspirate or fat), fluid resuscitation and urinary monitoring are recommended with overnight surveillance.
#4 As an early user of SMARTLipo, I do not have any comparisons to other 7 FDA-cleared LAL devices. One should evaluate the company’s selection of wavelengths that are optimally absorbed to the target chromophores (water, fat, and collagen) before purchasing a device. Also, one should evaluate the safety mechanisms incorporated in the device to provide uniform and safe thermal injuries. Lastly, one should evaluate the peer-reviewed articles to ascertain the claims of safety and efficacy.

#5 As I mentioned in my presentation, the percentage of viable cells observed immediately after harvesting by WAL is about 90%, LAL about 30%, and PAL about 50-60%. VASER is investigating cell viability after high frequency ultrasound (35KHz) and may be another device that can be reliably produce living cells. Skin tightening requires some degree of optimal dermal thermal heating (38-42°C) to produce active contraction as opposed to passive accommodation of skin to a devolumized area.

#6 Suctioning to create a 6-pack appearance is very inconsistent in my hands. I believe that any device from TL, PAL, WAL, VAL and LAL can produce this appearance. However, there are some devices such as VAL and LAL than can create such an appearance more efficiently (but can also produce deformations) than others.

#7 I believe that local tumescent anesthesia for small-moderate volume cases can be safely and efficiently performed using TL, PAL, VAL, LAL and WAL devices and in an office setting without an anesthesiologist. An IV access should be available. Resuscitation fluids and urine output measurements are at the discretion of the surgeon.