

Which Liposuction Technique is Best?

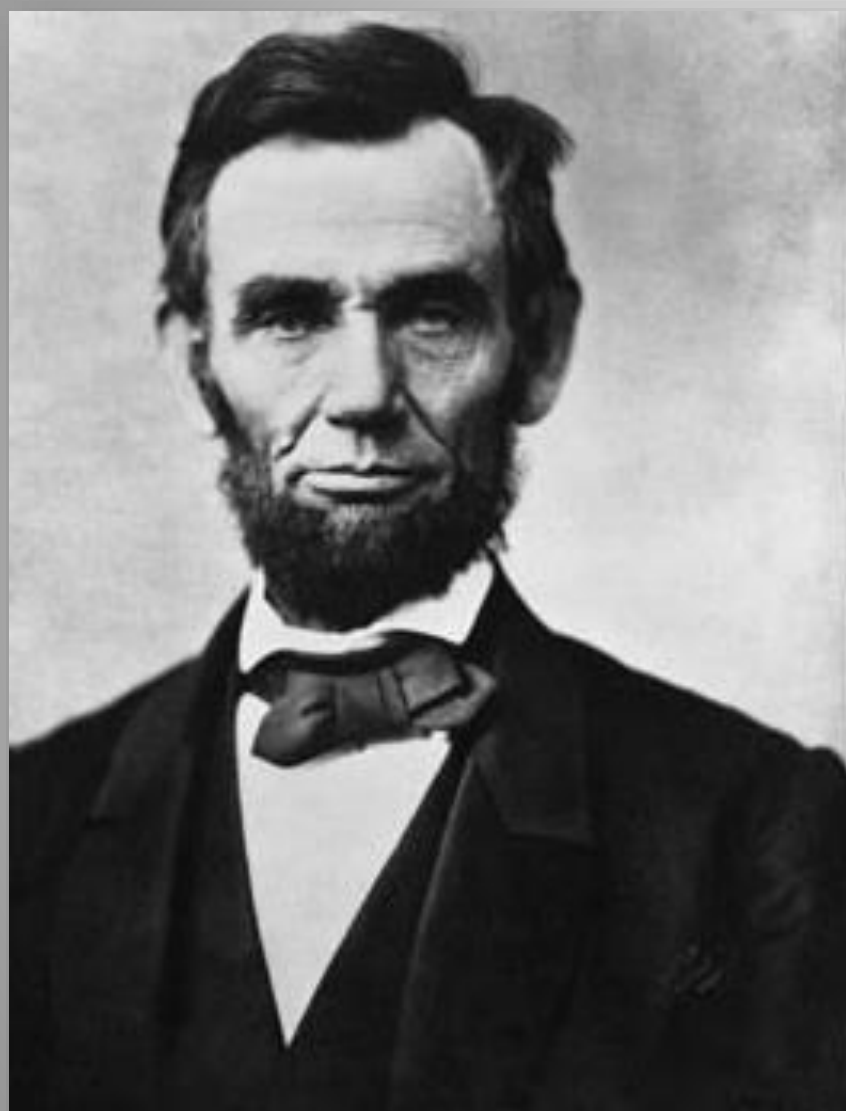
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THE UNIVERSITY OF
CHICAGO



**“Don’t believe
everything you
read on the
Internet just
because there’s
a picture with a
quote next to it.”**

—Abraham Lincoln

Traditional Liposuction

Dependable & reliable

Low cost

No energy damage

Low risk



Power Assisted Liposuction

Dependable & reliable

Low cost

No energy damage

Shorter procedure

Best for “tough” tissue



Ultrasound & Vaser Assisted Liposuction

Dependable & reliable

High cost

Possible energy damage

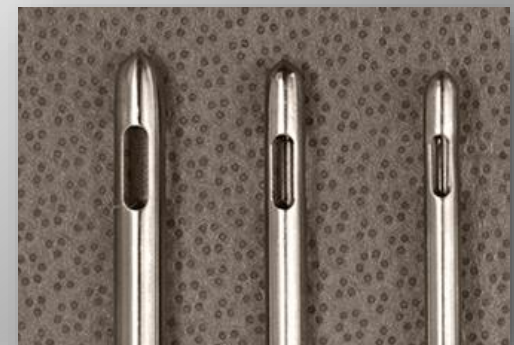
Longer procedure

Requires 2 parts

Vaser treatment to break up fat

Traditional liposuction to remove fat

No evidence of skin tightening



Water Assisted Liposuction (BodyJet)

Dependable & reliable

Moderate cost

No energy damage

Longer procedure

Additional water adds to fat removal limit

No evidence of “more gentle” treatment



Laser Assisted Liposuction (SmartLipo)

Dependable & reliable

Very high cost

Possible energy damage

Prolonged swelling

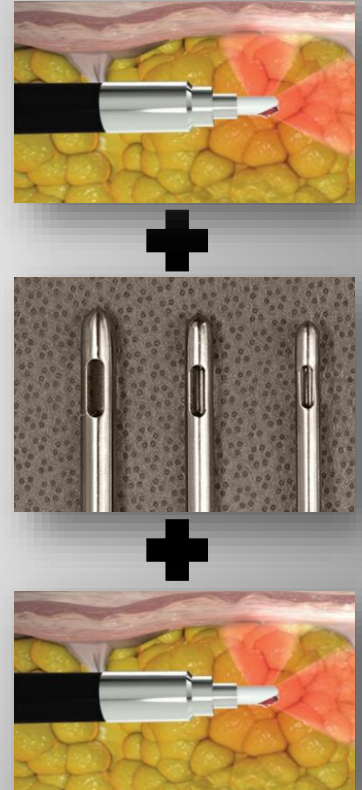
Longer procedure

Requires 3 parts

Laser treatment to break up fat

Traditional liposuction to remove fat

Laser treatment to tighten skin



Liposuction & Skin Tightening

- Many claims to tighten the skin
- Mostly unproven
- Ultrasound (UAL) - many claims in the 1990's but no evidence
 - Vaser (VAL) – Split study vs SAL, no patient reported difference at 6 months
 - Laser (LAL) – Split study vs SAL, LAL 17% tighter at 3 months

A Multicenter, Prospective, Randomized, Single-Blind, Controlled Clinical Trial Comparing VASER-Assisted Lipoplasty and Suction-Assisted Lipoplasty

Michael W. Nagy, M.D.
Paul F. Vanek, Jr., M.D.

Toms River, N.J.; and Mentor, Ohio

Background: No scientific comparative study has demonstrated any statistically significant clinical improvement attributable to a new lipoplasty technology relative to traditional suction-assisted lipoplasty. This prospective study used a contralateral study



Cosmetic Medicine

Randomized, Blinded Split Abdomen Study Evaluating Skin Shrinkage and Skin Tightening in Laser-Assisted Liposuction Versus Liposuction Control

Barry E. DiBernardo, MD

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SAGE

How Much Fat Can be Removed?



PATIENT SAFETY
Outcomes Article

2009

Evidence-Based Patient Safety Advisory: Liposuction

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Summary: Liposuction is considered to be one of the most frequently performed plastic surgery procedures in the United States, yet despite the popularity of liposuction, there is relatively little scientific evidence available on patient safety issues. This practice advisory provides an overview of various techniques, practices, and management strategies that pertain to individuals undergoing liposuction, and recommendations are offered for each issue to ensure and enhance patient safety. (*Plast. Reconstr. Surg.* 124 (Suppl.): 28S, 2009.)

- 5000 cc limit
 - Includes removed fat **and** fluid
- Otherwise should be
 - **Staged** – 2 or more outpatient procedures
 - **Monitored overnight** – 1 procedure but higher cost
- No evidence to support this limit
 - Accepted by most surgery facilities & law in some states

Is There a Liposuction Limit?

 COSMETIC

2015

Is There a Safe Lipoaspirate Volume? A Risk Assessment Model of Liposuction Volume as a Function of Body Mass Index

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Background: No concrete data exist to support a specific volume at which liposuction becomes unsafe; surgeons rely on their own estimates, professional organization advisories, or institutional or government-imposed restrictions. This study represents the first attempt to quantify the comprehensive risk associated with varying liposuction volumes and its interaction with body mass index.

Methods: Suction-assisted lipectomies were identified from the Tracking Operations and Outcomes for Plastic Surgeons database. Multivariate regression models incorporating the interaction between liposuction volume and body mass index were used to assess the influence of liposuction volume on complications and to develop a tool that returns a single adjusted odds ratio for any combination of body mass index and liposuction volume. Recursive parti-

- Liposuction limit should be based on BMI
- More than 100 cc per BMI increases complications
- Most common complication: Seroma
- Not yet accepted by most surgical facilities or laws

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Liposuction Options

- Traditional (SAL)
- Power Assisted (PAL)
- Ultrasound Assisted (UAL)
- VASER Assisted (VAL)
- Laser Assisted (LAL) aka SmartLipo
- Water Assisted BodyJet (WAL)
- Radio Frequency Assisted (RAL)
 - BodyTite, FaceTite
- J-Plasma / Renuvion (Helium Plasma Assisted)

Skin Tightening Claims

- Traditional (SAL)
- Power Assisted (PAL)
- **Ultrasound Assisted (UAL)**
- **VASER Assisted (VAL)**
- **Laser Assisted (LAL)**
- Water Assisted BodyJet (WAL)
- **Radio Frequency Assisted (RAL)**
 - BodyTite, FaceTite
- **J-Plasma / Renuvion (Helium Assisted)**

Skin Tightening Claims

- Traditional (SAL)
- Power Assisted (PAL)
- **Ultrasound Assisted (UAL) Not Supported**
- **VASER Assisted (VAL) Not Supported**
- **Laser Assisted (LAL) Supported by PRS**
- Water Assisted BodyJet (WAL)
- **Radio Frequency Assisted (RAL) Supported by PRS**
 - BodyTite, FaceTite
- **J-Plasma / Renuvion Not Supported Yet**

VAL & Skin Tightening

- 20 female patients 20 - 48 yo
- 33 anatomic regions split treatment (SAL vs VAL)
- Skin retraction changes in ultraviolet light tattoos
- VAL 53% more skin retraction (17% vs 11%)
- No difference in **subjective** measures
 - Pain, swelling, appearance, patient & physician preference

A Multicenter, Prospective, Randomized,
Single-Blind, Controlled Clinical Trial
Comparing VASER-Assisted Lipoplasty and
Suction-Assisted Lipoplasty

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RAL & Skin Tightening

- 12 female patients 20 - 61 yo
- Split abdomen treatment (SAL vs SAL + RF)
- 1 year skin contraction
 - SAL 8.3% vs SAL + RF 25.8%
- No patient reported outcomes

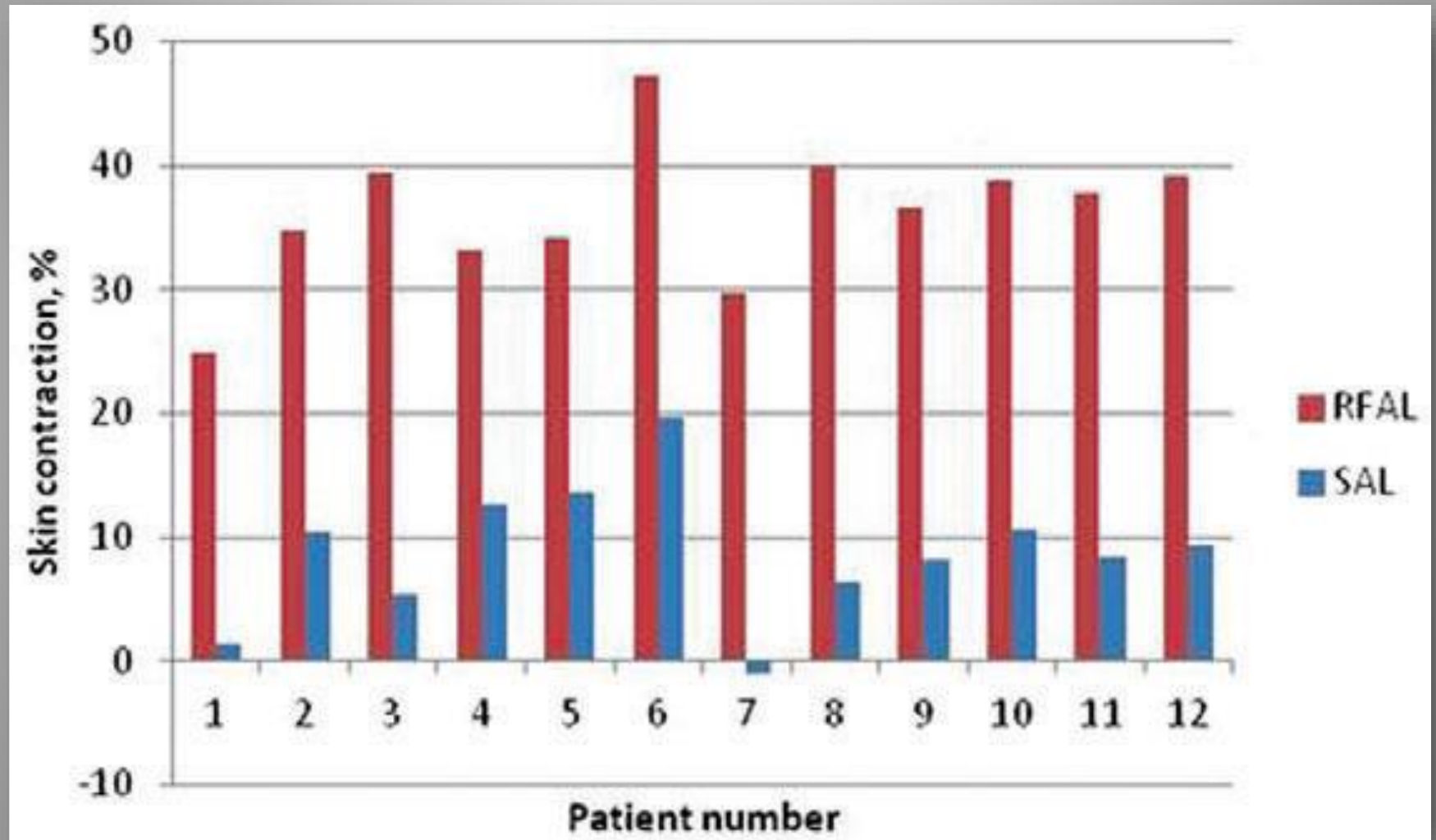
Body Contouring

Nonexcisional Tissue Tightening: Creating Skin Surface Area Reduction During Abdominal Liposuction by Adding Radiofrequency Heating

Diane Irvine Duncan, MD

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RAL & Skin Tightening



LAL & Skin Tightening

- 10 female abdomens
- Split study vs SAL
- LAL 17% tighter at 3 months

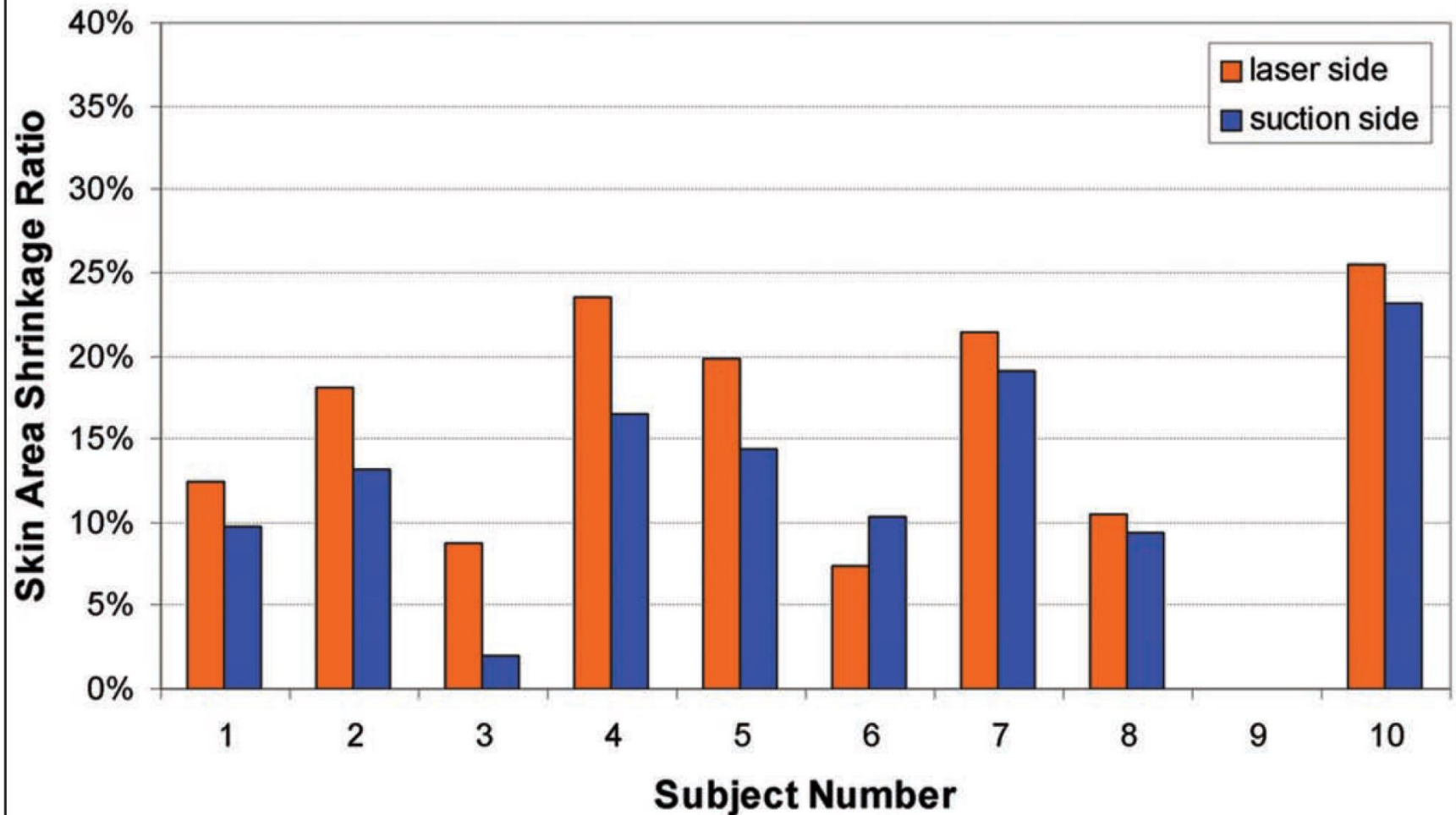
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Randomized, Blinded Split Abdomen
Study Evaluating Skin Shrinkage and Skin
Tightening in Laser-Assisted Liposuction Versus
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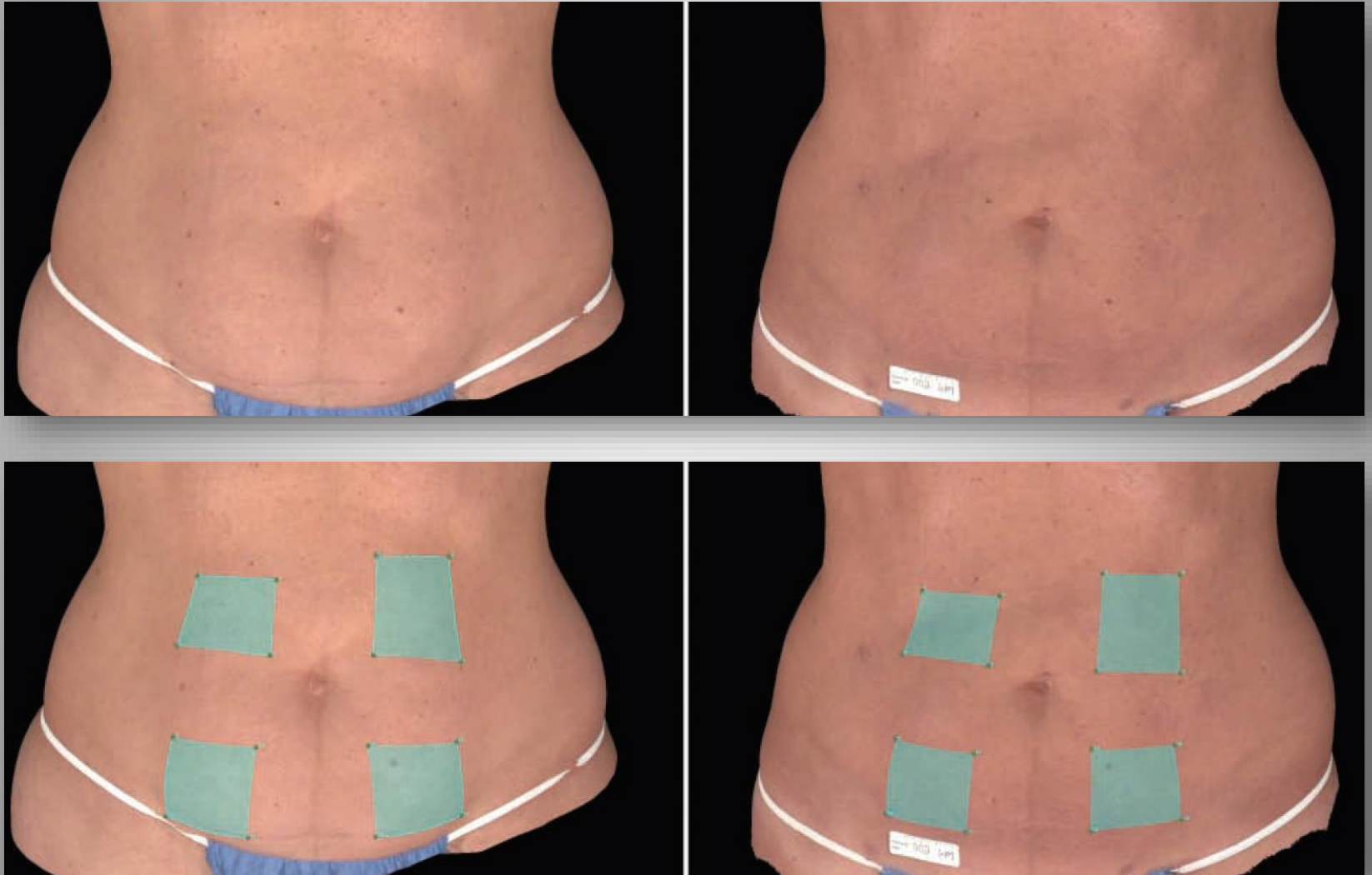
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LAL & Skin Tightening



LAL & Skin Tightening



LAL Claims

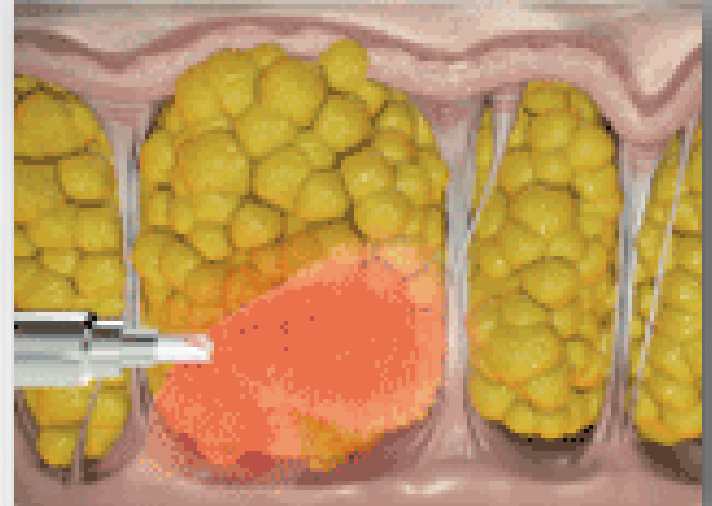
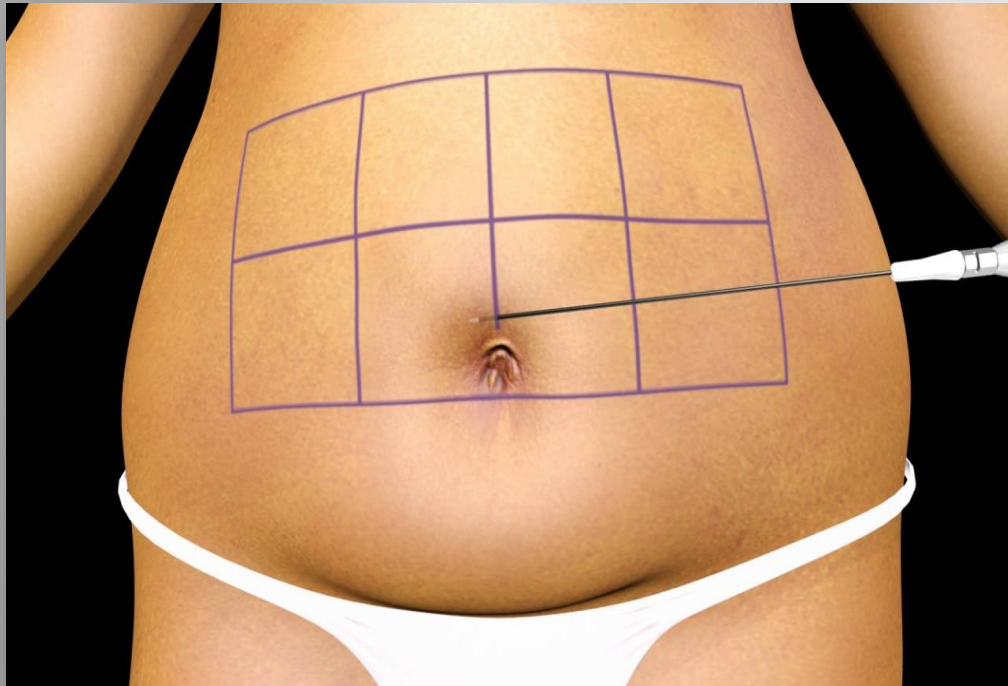
- Done awake
- No sutures
- Less bruising
- Faster recovery
- Better fat disruption
- Blood vessel coagulation
- **Collagen stimulation**



LAL Disadvantages

- Cost
- Cost
- Cost
- Takes more time
- Prolonged edema
- Risk of thermal injury
- Fibrosis

How does it Work?



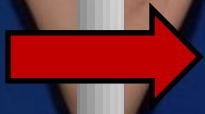
Complications



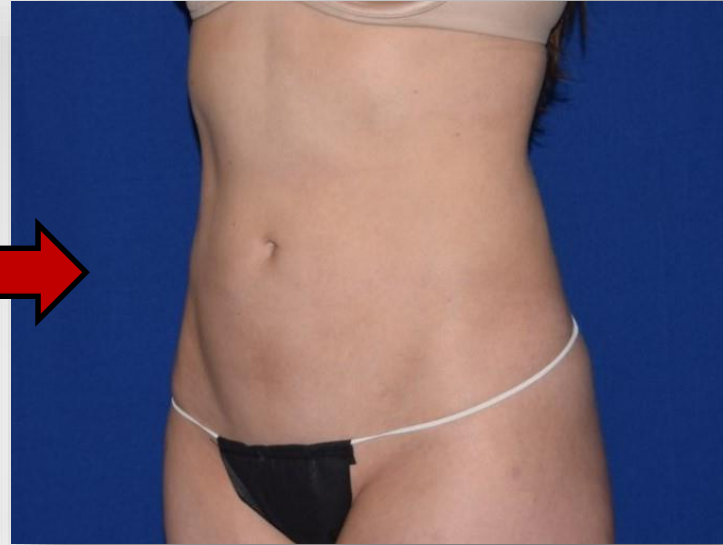
Results: Personal Experience

- Jowls – Maybe?
- **Submental – Yes!**
- **Arms – Yes**
- Back & Bra Rolls – Maybe?
- Flanks & Love Handles – Not needed
- Abdomen – Minimal?
- Inner Thighs – No
- Outer Thighs – Not needed

PAL vs LAL



SAL vs LAL



PAL Alone

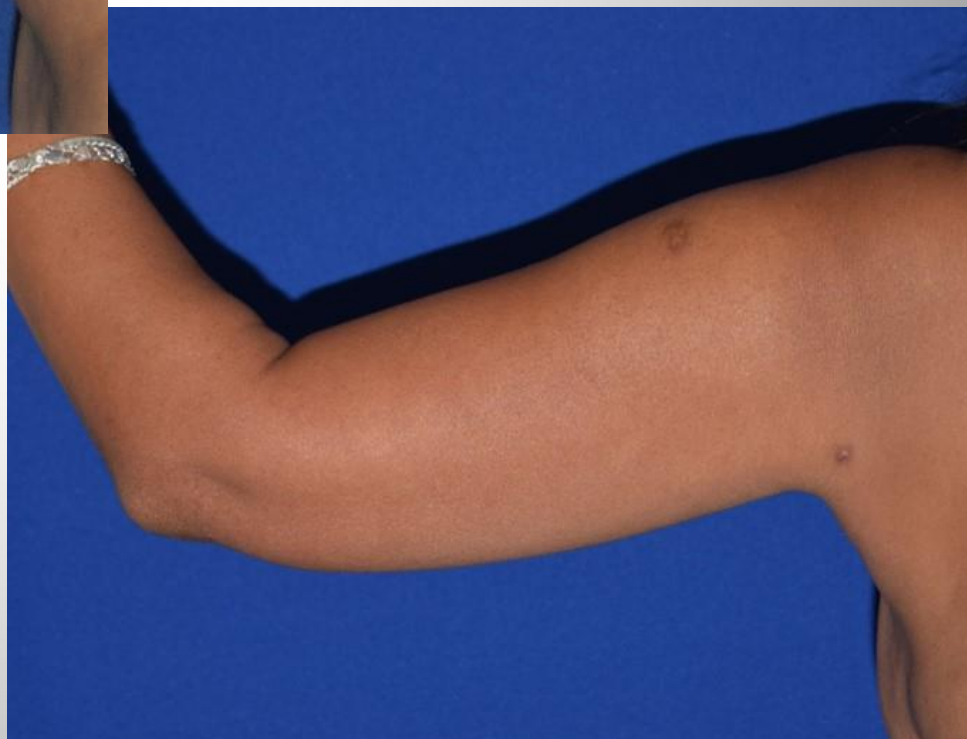


PAL Alone



Laser Assisted Liposuction

Best Results in Submental Skin
Contraction and Arm Contouring





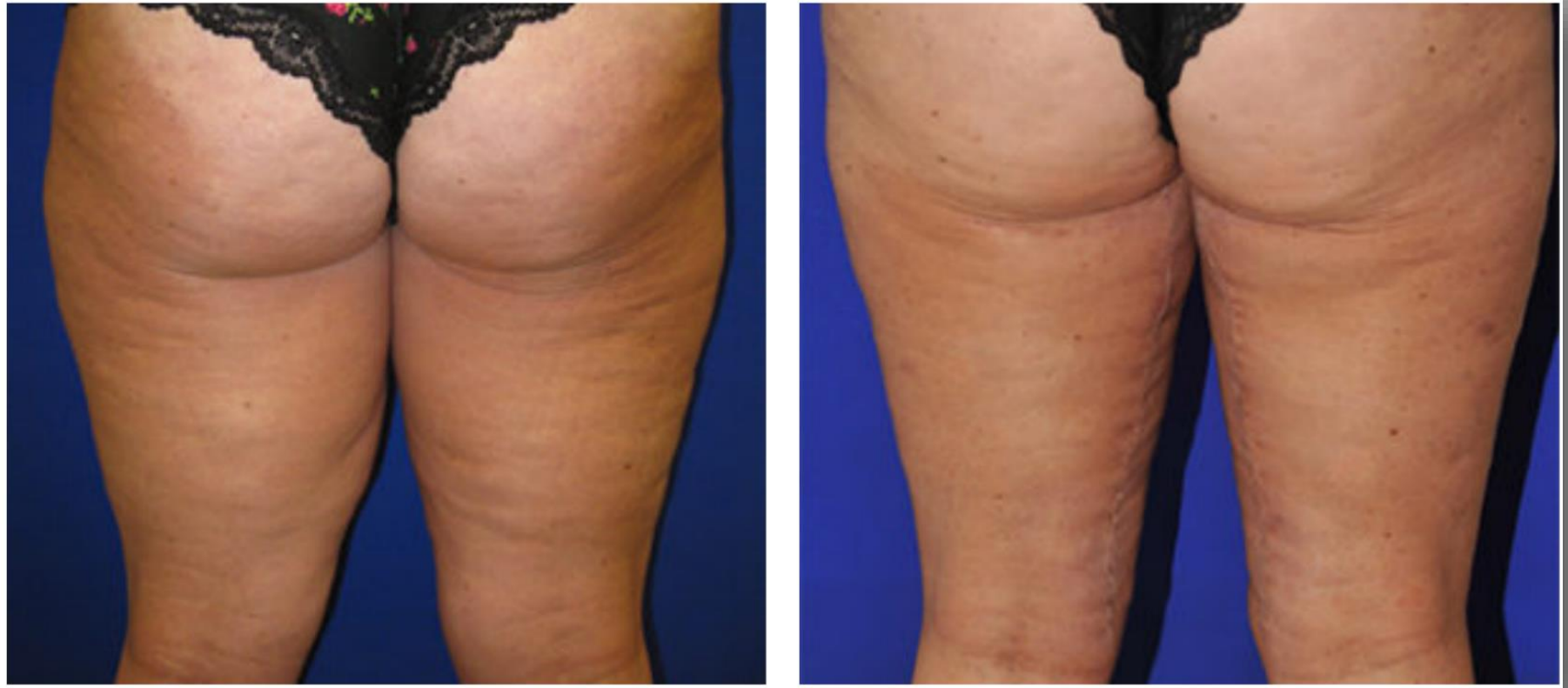


Deceptive Marketing



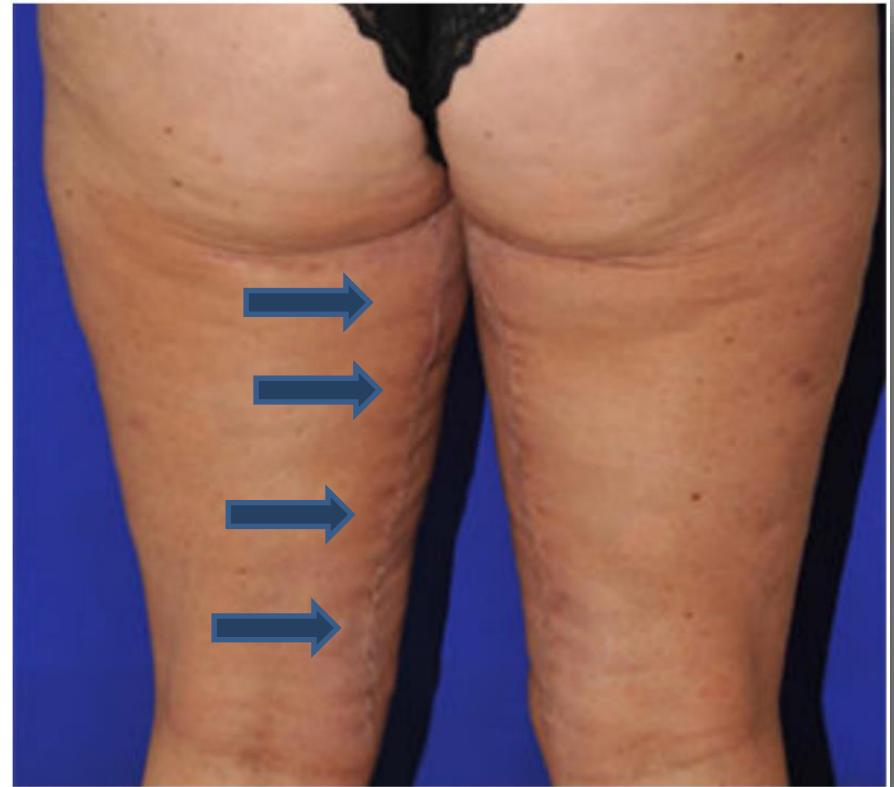
Before & after High Def Vaser liposuction, 3 sessions

Deceptive Marketing



Before & after High Def Vaser liposuction, 3 sessions

Deceptive Marketing



Fake News! This patient had a **thigh lift!**

Traditional Liposuction Results



Traditional Liposuction Results



Big Cases

Full Lower Extremity Lipedema



Anterior Calf & Inner Knee Liposuction



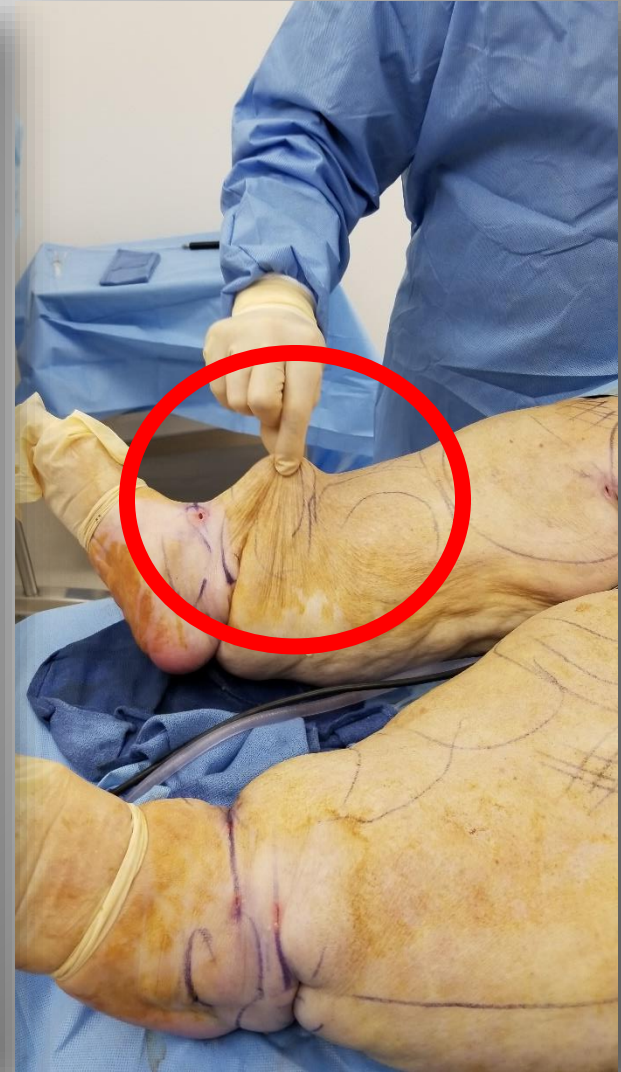
Fully Awake Tumescant Anesthesia



Fully Awake Tumescant Anesthesia

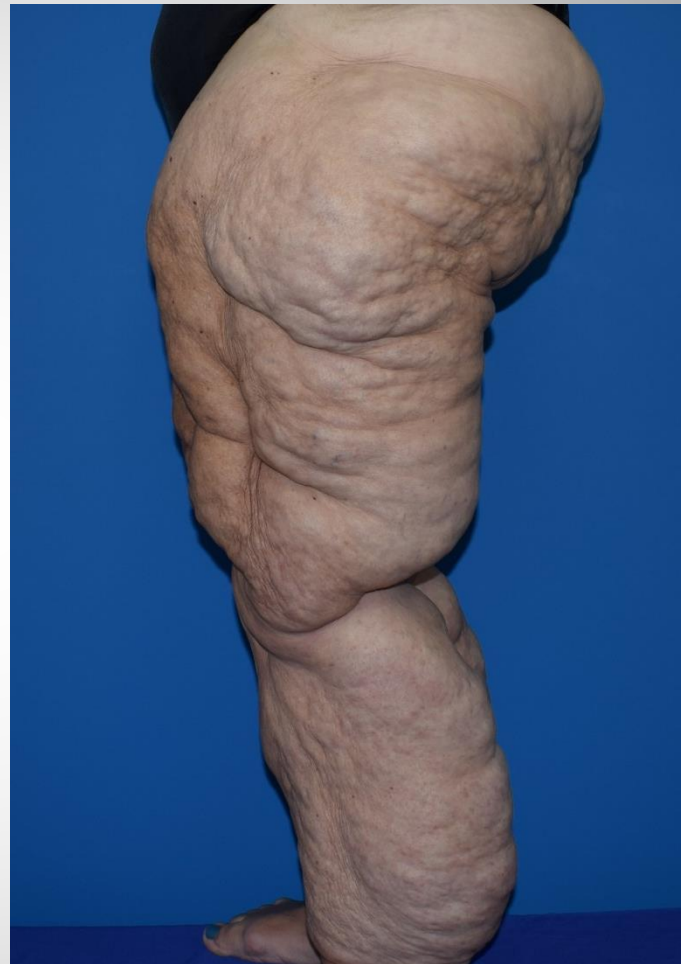


Fully Awake Tumescant Anesthesia











**If you really need to get tight
skin...cut it out**

It's a Process.....



Before



After 2 rounds of
liposuction
SAL & PAL

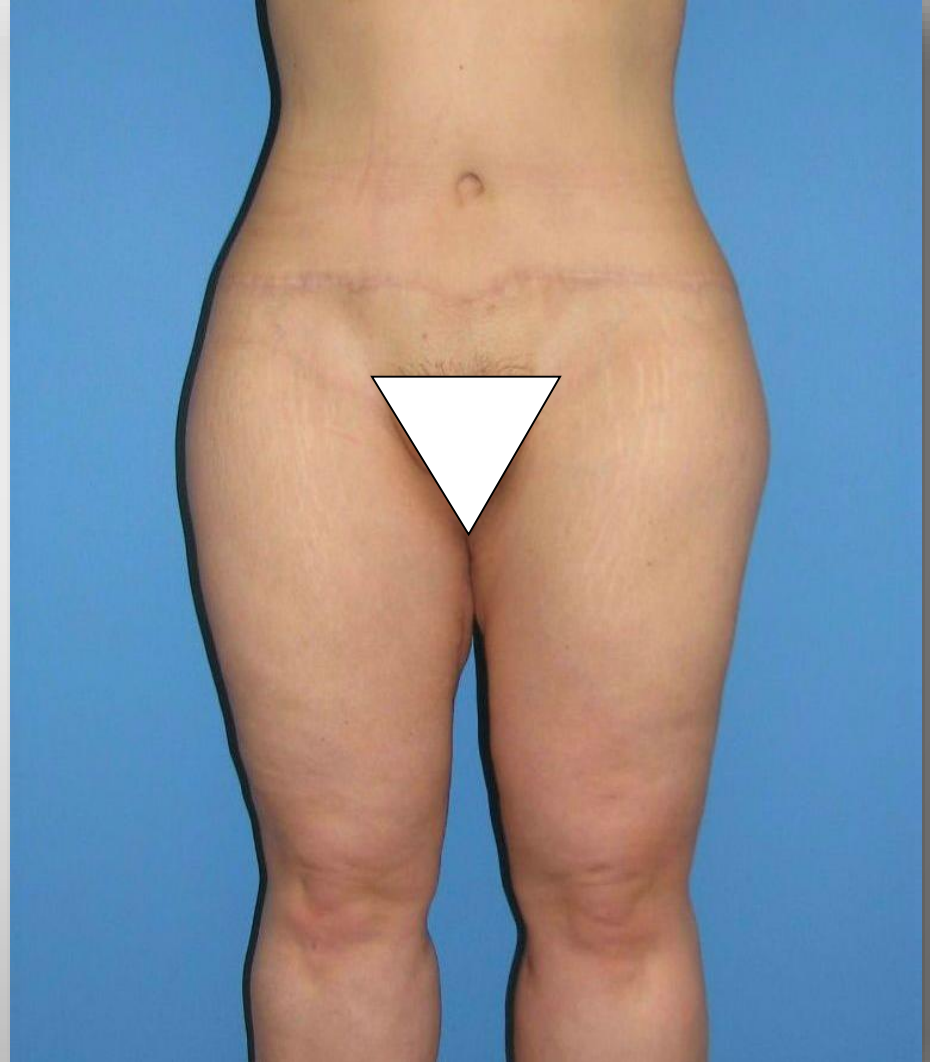


After liposuction &
thigh lift

SAL 2 Stages



Thigh & Body Lift



Personal Experience and Conclusions

- All awake with tumescent analgesia
- Does NOT help with fat disruption
 - Male chest & back
 - Gynecomastia
- Much harder to revise after LAL
 - More fibrosis
- More steroid injections for bands & lumps
- Better results in submental skin contraction

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