Treating Lipedema with Liposuction

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Disclosures

Merz
Syneron/Candela

May use brand names due to lack of distinguishing generic names
What is Lipedema?

- Fat overgrowth disorder
- Women’s lower extremities
Why do we Need to be Aware

- It is common
- Significant quality of life issue
- Non-plastic surgeons treating it with liposuction
- Much misinformation about which liposuction technique is best
  - Water Lipo (BodyJet)
Deceptive Lipedema Treatment

Before & after High Def Vaser liposuction, 3 sessions
Deceptive Lipedema Treatment

Before & after High Def Vaser liposuction, 3 sessions
Fake News! This patient had a **thigh lift**!
It’s a Process.......
Published Papers in PubMed

- Lipedema: 183 results
- Lipedema Treatment: 114 results
- Lipedema Surgery: 65 results
- Lipedema Liposuction: 38 results
  - Primary studies on liposuction: 9 publications
  - Reviews of literature: 4 publications
- Comparative studies: 0
- Randomized controlled studies: 0
- Lymphatic Sparing Liposuction: 3 results
  - 0 related to Lipedema
Liposuction Options

- Traditional (SAL)
- Power Assisted (PAL)
- Ultrasound Assisted (UAL)
- VASER Assisted (VAL)
- Laser Assisted (LAL)
- Water Assisted BodyJet (WAL)
Small Study: Power Assisted Lipo

- Vibration liposuction (PAL)
- Good results with significant pain and leg volume reduction

Liposuction is an effective treatment for lipedema – results of a study with 25 patients

Stefan Rapprich, Anne Dingler, Maurizio Podda
Department of Dermatology, Darmstadt Hospital, Germany

DOI: 10.1111/j.1610-0387.2010.07504.x
Tumescent liposuction in lipoedema yields good long-term results

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• 164 patients treated with PAL
• 112 evaluated at more than 1 year with standardized questionnaire
• Overall significant improvement in volume, QOL, etc
Best Study: Power Assisted Lipo

- Follow up of previous study
- Compared to 4 years, improvement in pain, sensitivity to pressure, edema, bruising, restricted movement, patient self-assessment cosmetic appearance, quality of life & overall impairment persisted
- At 8 years, reduction in amount of conservative treatment similar to 4 years
- Demonstrates long-lasting positive effects of power assisted liposuction
• False & unsupported claims about tumescent fluid & liposuction
• Analyzed the **removed fat tissue**, not what was left behind
• Did **not** compare to any other liposuction technique
• Very low fat removal volumes
• No clinical results measured
What is Removed Matters

Power-assisted liposuction (PAL) is more efficient and can remove more fat compared to water-assisted liposuction (WAL).
Liposuction & Skin Tightening

• Many claims to tighten the skin
• Mostly unproven
• Utrasound (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
How Much Fat Can be Removed?

- **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

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**Evidence-Based Patient Safety Advisory: Liposuction**

*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.)*
Is There a Liposuction Limit?

• 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
Lymphatic System

• Superficial Lymphatic System
  – Medial vessels follow the great saphenous vein
  – Lateral vessels follow the small saphenous vein

• Deep Lymphatic System
  – Follows the deep arteries

• Lymphatic vessels follow the blood vessels
  – If blood vessels are not injured, neither are the lymphatics

• Lymphatic problems do not happen after normal liposuction
“Lymphatic Sparing Liposuction”

- Small cadaver study suggesting less damage to lymphatic system when liposuction is done longitudinally vs transversely.
- Nearly all liposuction is done longitudinally (in the same direction as the lymphatic vessels) in the extremities.
- Long-term lymphatic damage is not an issue after liposuction.
- “Lymphatic Sparing Technique” is actually normal liposuction.
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