Noninvasive Modalities in Lipolysis

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Disclosure

Relevant Financial Relationship:

• Compensated speaker for Syneron Candela
Lecture Objectives

• Introduction and overview of the noninvasive options for in-office treatment of unwanted fat

• Discuss use of these modalities in your office

• Review treatment hazards and possible complications

• Live demonstration of a few available modalities
Why this Market Matters

- According to the American Society for Aesthetic Plastic Surgery:
  - Americans spent 13.5 billion in 2015 on both surgical and non-surgical aesthetic procedures, 42% of that was non-surgical.
  - Due to the risks associated with invasive body contouring, non-invasive procedures have increased 521% from 1997 to 2013.
  - Non-surgical fat reduction saw an increases from 2015-2016 of 18.7%.
Why this Market Matters

Global Non-Invasive Fat Reduction Market Revenue
By Region, 2017 (US$ Mn)

- Middle East and Africa: XX.X
- Asia Pacific: XX.X
- Latin America: XX.X
- Europe: XX.X
- North America: US$ 430.3 Mn

CAGR 15.9%
(2017 – 2025)

Reasons for this growth

- Aging population
- More men seeking treatments
- Avoidance of surgical procedures: cost, downtime, fear
- Technological breakthroughs and scientific advancements
- Media, social media, celebrity culture
The Technology: FDA Cleared

- Cryolipolysis
- Radiofrequency
- Low-Level Laser Therapy
- High-Intensity Focused Ultrasound
<table>
<thead>
<tr>
<th>TECHNIQUE</th>
<th>TECHNOLOGY</th>
<th>PROVIDER</th>
<th>*AVERAGE PATIENT COST</th>
<th>*DURATION OF SESSION</th>
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</thead>
<tbody>
<tr>
<td>CoolSculpting®</td>
<td>Cryolipolysis.</td>
<td>ZELTIQ</td>
<td>$2000-2,250</td>
<td>1 hour/ area</td>
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<tr>
<td>BTL Vanquish®</td>
<td>Radiofrequency</td>
<td>BTLaesthetics</td>
<td>$500-750/ session</td>
<td>45 mins/ area</td>
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<tr>
<td>BTL Exilis Ultra™</td>
<td>Focused RF + Ultrasound</td>
<td>BTLaesthetics</td>
<td>$1,375 average cost</td>
<td>20-30 mins/ session</td>
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<tr>
<td>SculpSure®</td>
<td>1060nm laser</td>
<td>Cynosure</td>
<td>$300-350/treatment applicator</td>
<td>25 mins/ area</td>
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<tr>
<td>UltraShape®</td>
<td>Ultrasound waves.</td>
<td>Syneron Candela</td>
<td>$800-1,000/ session</td>
<td>45 mins -1 hour/ area</td>
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<tr>
<td>Liposonix®</td>
<td>High- intensity focused ultrasound</td>
<td>Solta medical</td>
<td>$150-300/ square</td>
<td>1 hour / session</td>
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<tr>
<td>TruSculpt®.</td>
<td>Radiofrequency</td>
<td>Cutera</td>
<td>$1,700 average price</td>
<td>30 mins-1 hour/ session</td>
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<tr>
<td>Venus Freeze™</td>
<td>Radiofrequency and magnetic pulses</td>
<td>Venus treatments</td>
<td>$1,225 average price</td>
<td>15-40 mins/ session</td>
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<tr>
<td>i-Lipo™</td>
<td>Low level laser (600- 650 nm laser)</td>
<td>i-Lipo</td>
<td>$3,650 average cost</td>
<td>20-30 mins</td>
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<tr>
<td>Invasix BodyFX™</td>
<td>Vacuum, Radiofrequency</td>
<td>Invasix</td>
<td>$2,000-2,250 average cost</td>
<td>30 mins-1 hour/ session</td>
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<tr>
<td>Verju™</td>
<td>532 nm laser diodes.</td>
<td>Erchonia</td>
<td>$60-280 average cost</td>
<td>20-40 mins</td>
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<tr>
<td>vShape Ultra</td>
<td>Ultrasound/Focused Radiofrequency</td>
<td>Alma Lasers</td>
<td>$600-1,100 per area average cost</td>
<td>30-60 mins/ session</td>
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<tr>
<td>Strawberry Laser Lipo</td>
<td>Low Level Laser</td>
<td>Laser Lipo Ltd.</td>
<td>$1,600 per area average cost</td>
<td>10 mins/ area</td>
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Cryolipolysis

- Exploits temperature sensitivity of adipocytes as compared to other water-rich cells
- Between 1940-1970, case reports showed gradual fat reduction in the lower cheeks of children that sucked on popsicles - “Popsicle panniculitis”
- Cold necrosis
- Gradual reduction over 3 months
- Erythema, numbness and bruising most common
- No change in lipids, LFTs
Before and After

BEFORE

8 WEEKS AFTER
First CoolSculpting® Session

9 WEEKS AFTER
Second CoolSculpting® Session
Radiofrequency

- Electromagnetic wave that can increase deeper skin temperature and lead to adipocyte damage
- Effective in skin tightening and fat reduction in repetition
- Exact protocols unknown and vary with each device
- Smoothing cellulite noted
Before and After

BEFORE

AFTER

BTL VANQUISH ME™
Before and After
Before and After

Abdomen

Before

After 8 treatments

Skin Tightening  Wrinkle Reduction  Cellulite Reduction  Body Contouring
Low-Level Laser Therapy

- 635nm and 532nm
- Cold red laser
- Reduces size of adipocyte via photoexcitation and release of FFAs, not cell necrosis
- SculpSure* - 1060nm - hyperthermic apoptosis of fat cells
Before and After

i-lipo™
Book now, take the first step to change your body

Before

After 8 sessions
Before and After
Before and After

After 4 treatments using the FDA cleared Verju Green Laser for the reduction of cellulite
Before and After

SculpSure™

Before & After 12 Weeks, 2 Treatments, Flanks and Abdomen
Weight Change: 0 lbs.  Courtesy of S. Doherty, MD
High Intensity Focused Ultrasound

- Used since the 1940s to treat organ tumors, uterine fibroids, kindness stones
- External transducer
- Ultrasonic energy to focal areas making molecular vibrations that increase temperature causing coagulative necrosis
- No change in LFTs or lipids
Before and After

6.5cm reduction | Post 3 treatments | Photos courtesy of Chris Inglefield, M.D.
Before and After

Photographs courtesy of Solta Medical Aesthetic Center

12 Weeks Post Treatment
4.05 cm reduction

liposonix®
Minimally Invasive

- Kybella/deoxycholic acid

- FDA approved for the treatment of submental fat

- Series of injections done 4-6 weeks apart

- MANY off-label applications:
  - Back fat, bra fat, knee fat, banana rolls, abdomen, jowls, lateral neck
Before and After
In Practice

- These modalities can operate as stand alone or adjunct therapies for treating unwanted fat, loose skin, and cellulite of both face and body.
- Many of the non-invasive modalities discussed do NOT have to be operated by a physician on PA/NP.
- Most treatments take at least 30 min of face to face time and this builds relationships, rapport, and brand loyalty.
- You can offer the patient something they have already read about or watched on Dr Oz, The View, The Doctors.
- Part of a multi-modality, all encompassing aesthetics practice.
Possible Pitfalls and Perils

- Knowing your contraindications
  - Hernias, Metal, Old Scars, Pacemakers, Cold-Sensitive Disorders
- Be aware of side effects
  - Pain, Swelling, Bruising, Numbness
  - Nerve damage (Marginal Mandibular etc)
- Patient selection must be appropriate
- Patient expectations must be reasonable
- Remaining fat can ALWAYS hypertrophy