

# cooltech<sup>®</sup>

CLINICAL STUDY

Dr. José Ramón Vázquez Casas



# STUDY ON SECURITY AND EFFICACY OF ADIPOCYTOLYSIS THROUGH FREEZING (Adipocytolysis assisted by freezing)

STUDY CONDUCTED BY:

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CENTER STAFF:

> Dolors Cámara – *Center Director.*

> Dr. José Ramón Vázquez – *Medical Director.*

> Dra. Paloma Mejina – *Plastic surgery.*

> Dra. Maria Foglia – *Cosmetic surgery. ENT Surgery.*

> Dr. Luis Navarro – *Vascular surgery and angiology.*

## PROCEDURE:

- > Prospective observational study.
- > 30 cases of abdominal freezing, conducted by vacuum with the CoolTech® to -8°C during one hour. No other intervention will be taken.
- > Results assessment after 45 days.
- > Abdominal perimeter assessment through a vacuum process in the abdomen area 5 centimeters below the navel
- > Photographic assessment of morphological changes.
- > Satisfaction rate assessment after procedure.
- > Side-effects evaluation: pain, paresthesia, bruising, localized erythema.

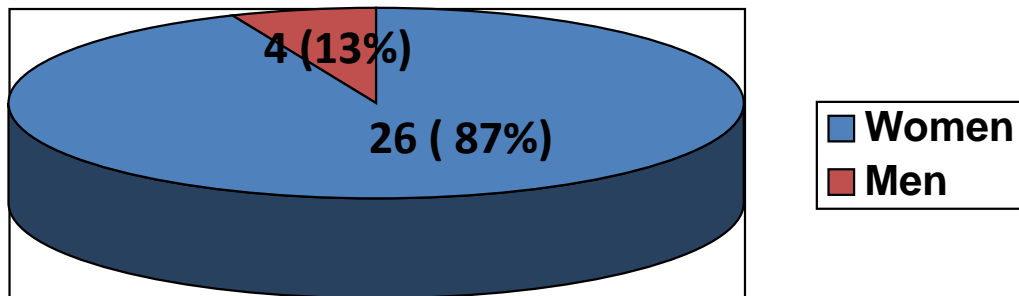
INCLUSION CRITERIA:

- > Above 18 years.
- > Sign the consent form.
- > Localized fat on an abdominal level through an ultrasonography bigger than 25 mm.
- > Do not present any contraindication to the technique.

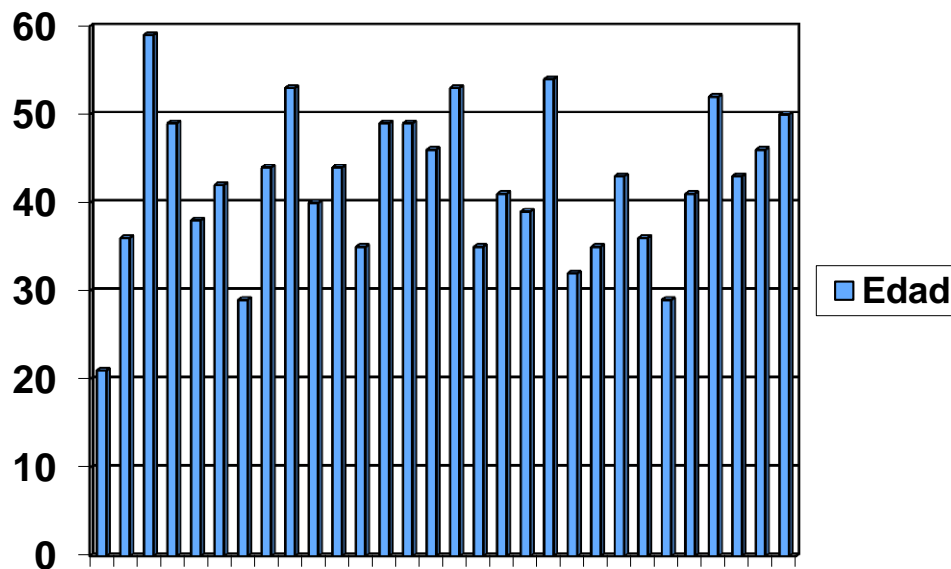
EXCLUSION CRITERIA:

- > Under 18 years.
- > Pregnancy.
- > Severe kidney failure.
- > Severe liver failure.
- > Poorly controlled diabetes with diabetic complications.
- > Cancer.
- > Fever.
- > Raynaud disease.
- > Cryoglobulinemia.
- > Systemic disease affecting the skin.
- > Aversion to cold.

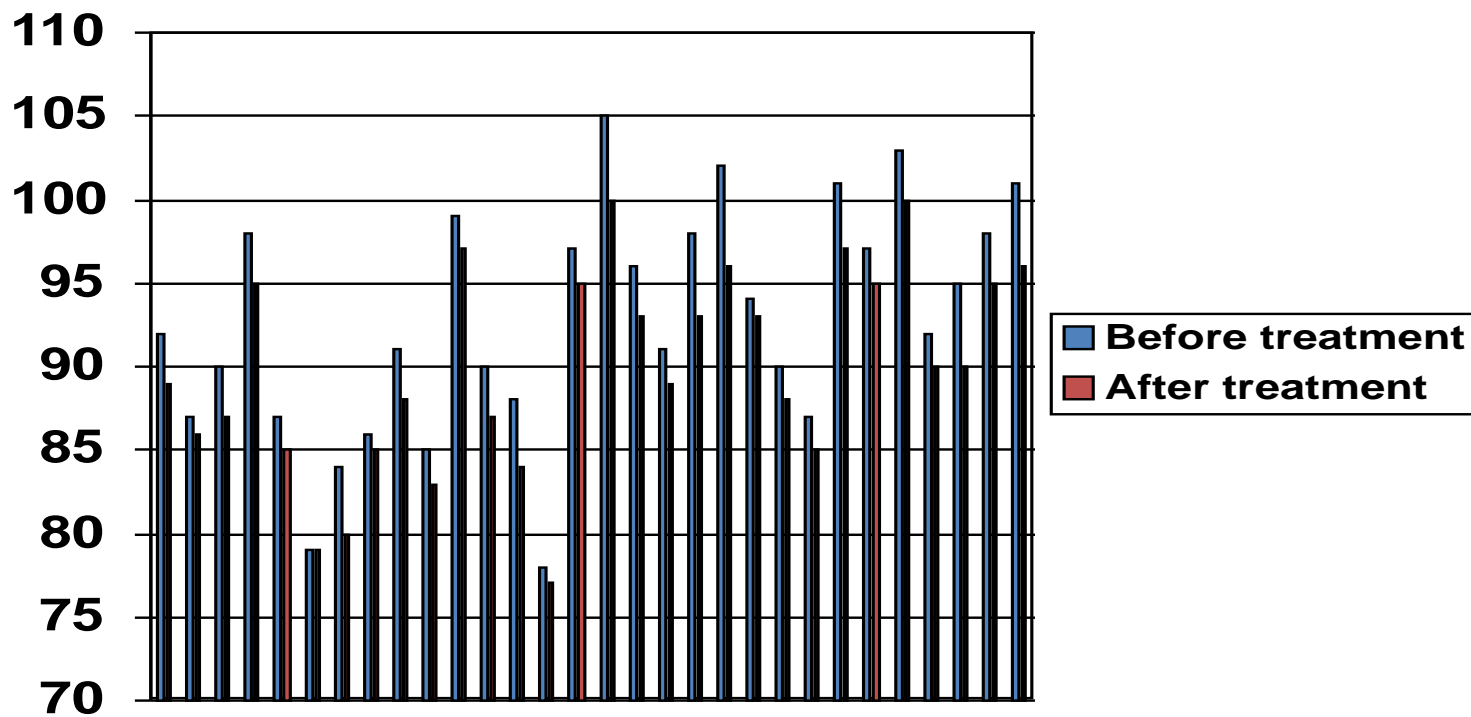
DEMOGRAPHIC DATA:



Assessment on 30 people, 26 women and 4 men with an average age of 43 years od.



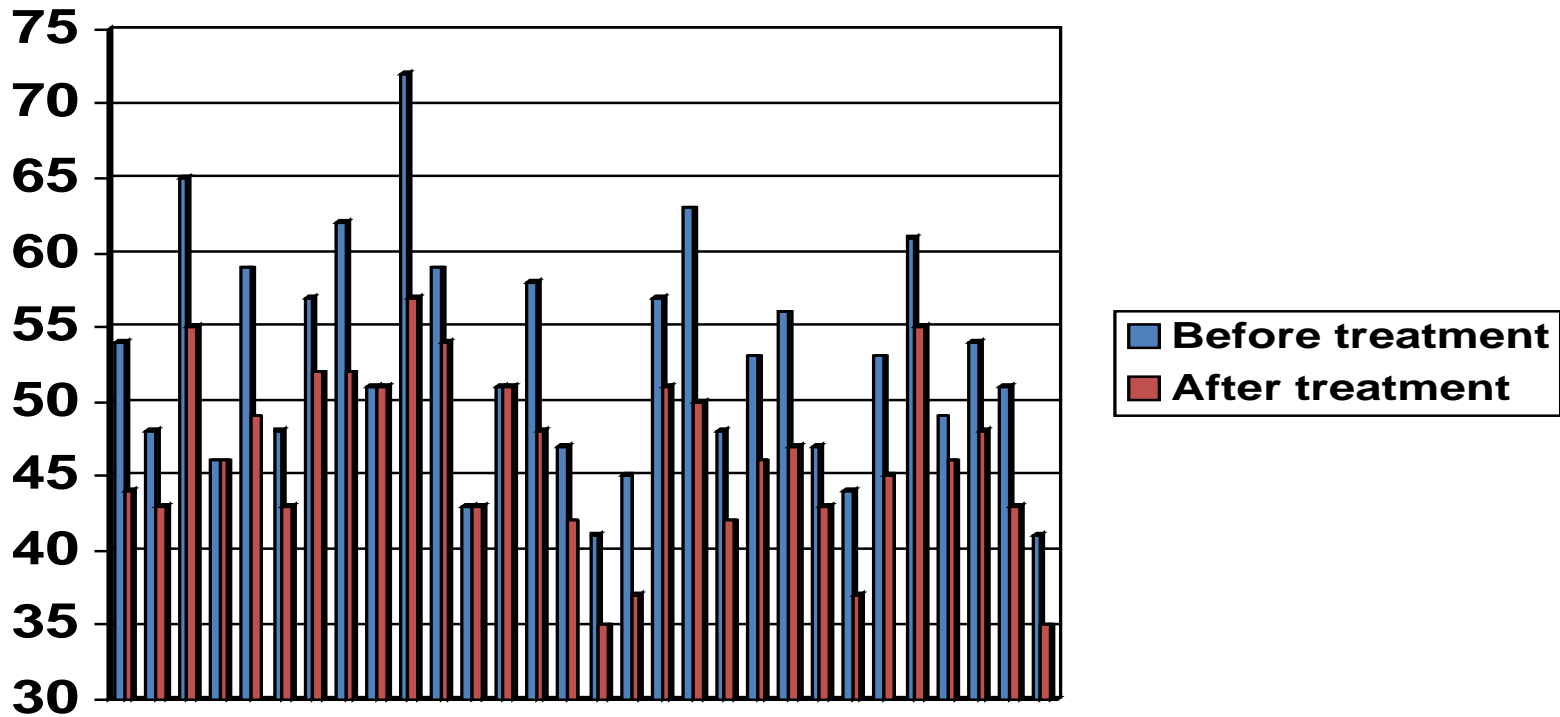
RESULTS:



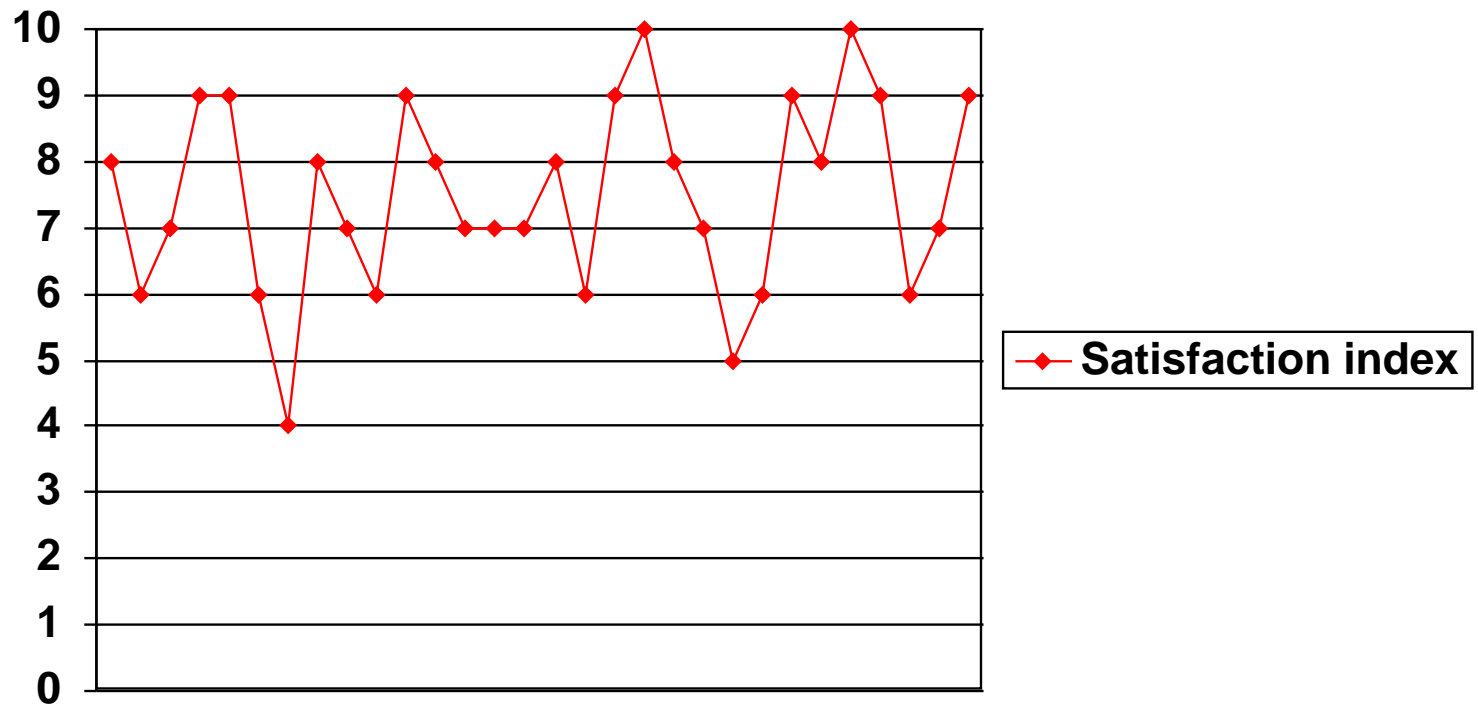
An average reduction of 5,9 on abdominal perimeter.



RESULTS:

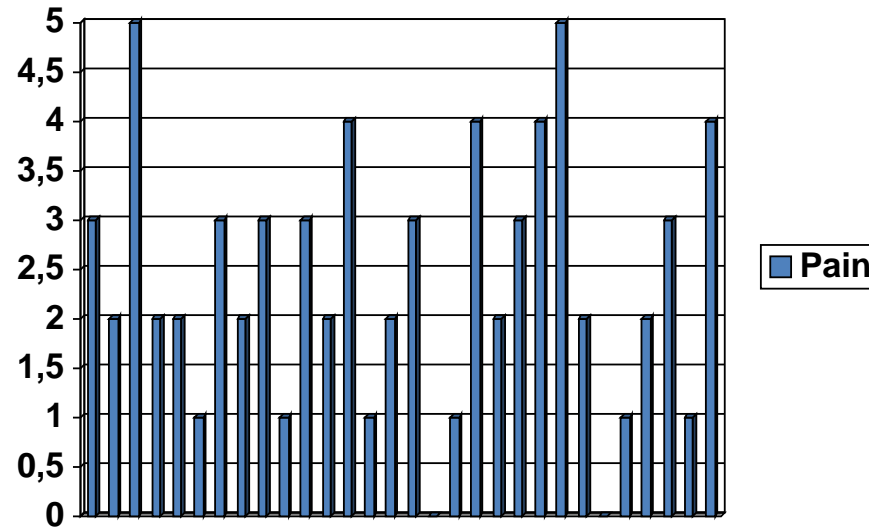


Average reduction of 52mm on adipose tissue thickness.

RESULTS:

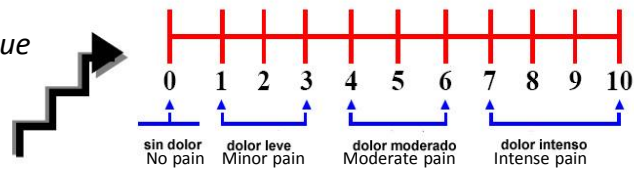
Index satisfaction rate of 7,5 / 10.

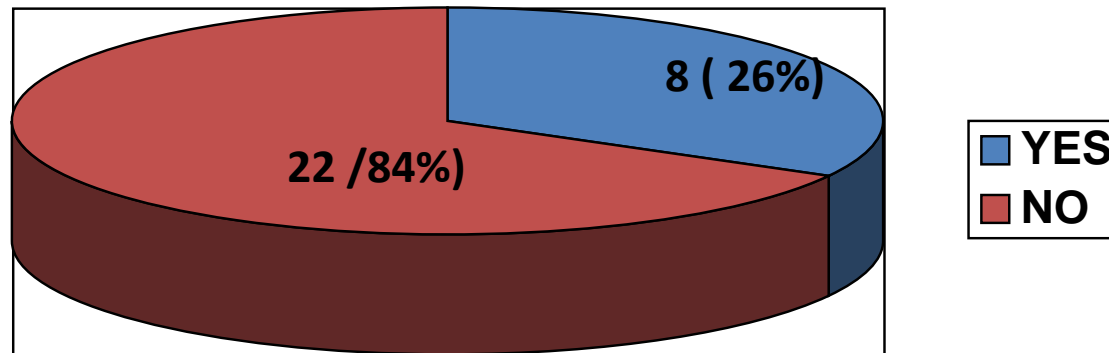
SIDE EFFECTS - PAIN:



Media de dolor de 2 medido por escala EVA.

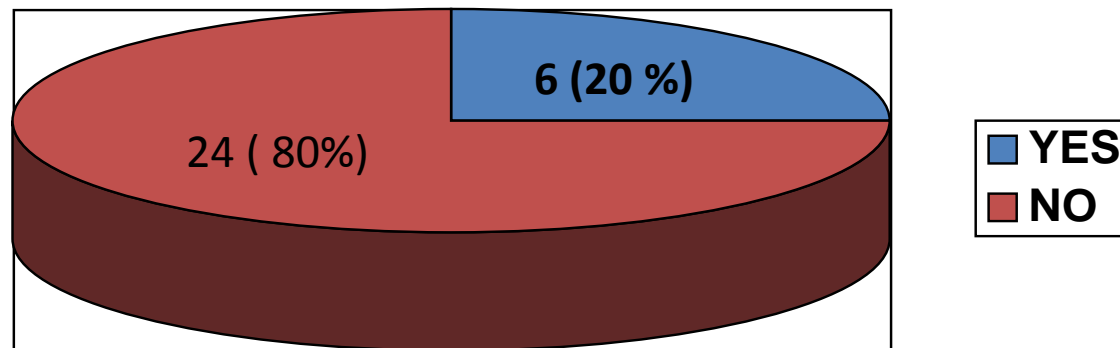
Pain Scale VAS((Visual Analogue Scale)



SIDE EFFECTS - BRUISING:

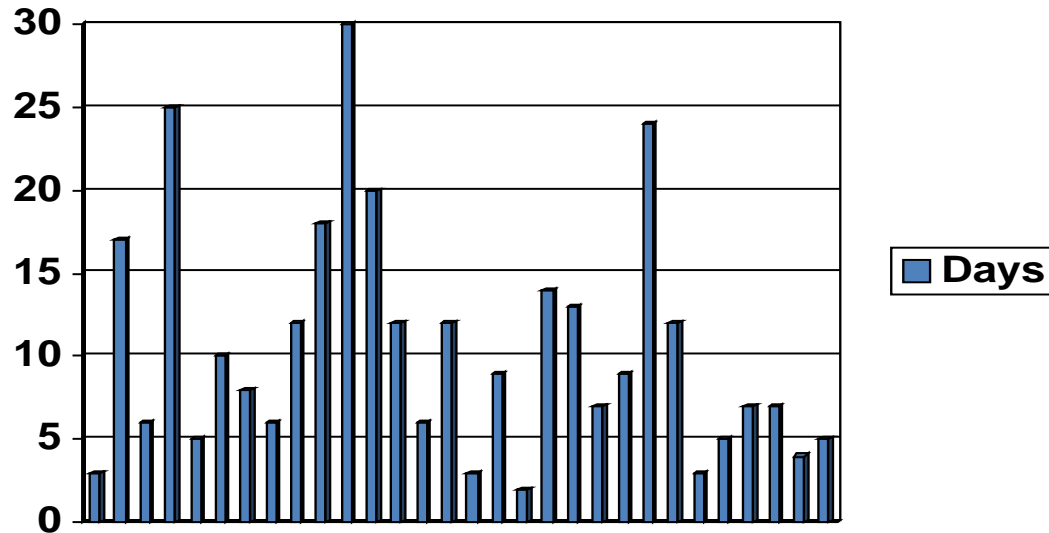
Minimum bruising on 26% of the patients

SIDE EFFECTS – SD CONSTITUTIONAL :



Constitutional SD (asthenia, myalgias and fever) 20%.

SIDE EFFECTS - PARESTHESIA:



Presence of paresthesia with an average duration of 10 days

## CONCLUSIONS:

- The adipocytolysis as a result of the freezing process is a non-invasive method of body fat removal, with minimum complications, allowing daily life activities right after the procedure.
- Significant reduction of abdominal perimeter and subcutaneous fat thickness.
- High patient's satisfaction rate after the treatment.
- Female population in their 40s is the main customer for this treatment.

LITERATURE:

> Non-invasive cryolipolysi for body contouring in Chinese- a firts commercial experience.

Shek SY, Chan NP, Chan HH.

Laseres Surg Med. 2012 Feb; 44(2): 125-30.

> Synergistic effects of cryolypolisis and shock wawes for noninvasive body contouring.

Ferraro GA, De Francesco F, Cataldo C, Rossano F, Nicoletti G, D'Andrea F.

Anesthetic Plast Surg. 2012 Jun; 36(3): 666-79.

> Cryolypolisis for reduction of excess adipose tissue.

Nelson AA, Wasserman D, Avram MM.

Lasers Surg med 2009 Dec; 28(4): 244-9.



- > Cryolypolisi for subcutaneous fat layer reduction.  
Avram MM, Harry RS.  
Lasers Sug Med. 2009 Dec;41(10): 703-8.
- > Cryolypolisis for noninvasive fat cell destruction: initial results from a pig model.  
Zelickson B, Egbert BM, Preciado J, Allison J, Springer K, Rhoades RW, Manstein D. Dermatol Surg. 2009 Oct;35(10): 1462-70.
- > Clinical efficacy of noninvasive cryolypolisis and its effects on pheripheral nerves.  
Coleman SR, Sachdeva K. Egbert BM, Preciado J, Allison J.  
Aesthetic Plast Surg. 2009 Jul;33(4):482-8.

cooltech®

CLINICAL RESULTS





BEFORE



AFTER

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> Female / 45 years

> 2 sessions / 6 weeks later

CASE 1



BEFORE



AFTER  
4 weeks

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> Female / 28 years

> 2 sessions / 4 weeks later

CASE 2



BEFORE



AFTER

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> Female / 28 years

> 2 sessions / 4 weeks later

CASE 2



BEFORE



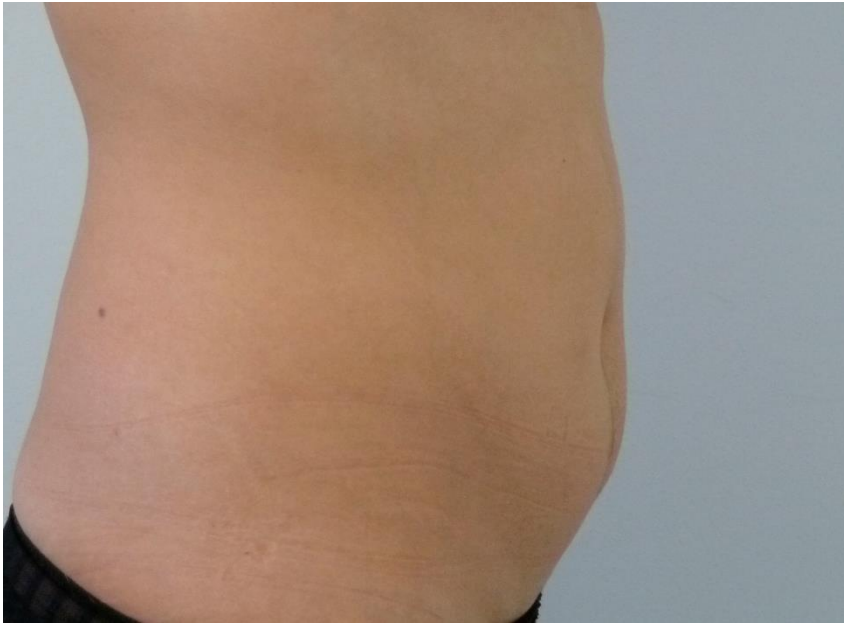
AFTER

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> Female / 34 years

> 1 session / 6 weeks later

CASE 3



BEFORE



AFTER

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> Female / 33 years

> 2 sessions / 6 weeks later

CASE 4



BEFORE



AFTER

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> Female / 26 years

> 2 sessions / 6 weeks later

CASE 5