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IMCAS

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**USE OF HIGH FREQUENCY AND HIGH POWER ULTRACAVITATION
ASSOCIATED WITH PHOSPHATIDYLCHOLINE/DESOXYCHOLATE
TO DECREASE THE ABDOMINAL SUBCUTANEOUS TISSUE**

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Statement of Disclosure

IMCAS 2010

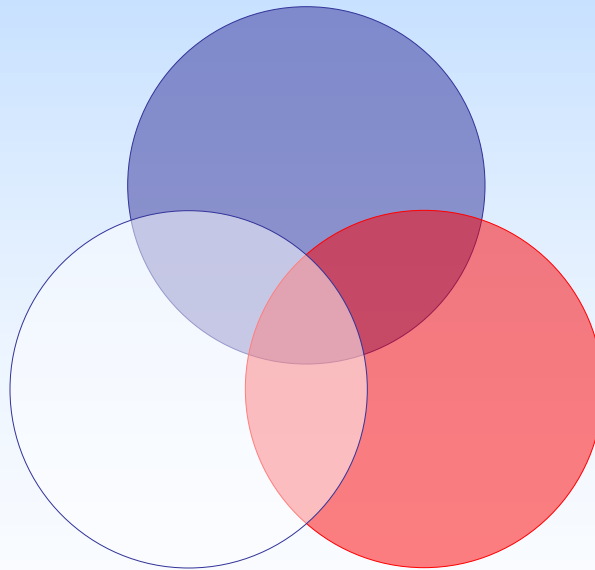
- . This work was not supported by any direct or non direct funding. It is under the author's own responsibility

OBJECTIVE OF THE STUDY

- USE A NON - INVASIVE TREATMENT FOR LOCALIZED ADIPOSITY**
- HAVE AESTHETIC RESULTS IN A SHORT TIME (ONE MONTH)**
- DEMONSTRATE THE EFFICACY OF THE CAVITATION METHOD IN ADIPOSE TISSUES WITH AN ECHOGRAPHIC PATTERN OF EDEMA**
- DIMINISH THE RISK OF THE USE OF ONLY ONE PHARMACOLOGICAL METHOD**

INCLUSION CRITERIA

**HEALTHY WOMAN 30-60 YEARS (49.7=a) WITH LOCALIZED ADIPOSE
TISSUE IN THE ABDOMINAL AREA**



**ABDOMINAL ADIPOSE TISSUE
>20mm**

BMI < 30

EXCLUSION CRITERIA FOR THE ULTRASOUND METHOD

Pregnancy

Acute hepatic or renal dysfunction

Metal implants and adjacent areas

Pacemaker

Patients with cancer

Zones with injuries/ulcers/ inflammations

Cerebral/Spinal shunt in the area

Adiposity less than 1 cm.

EXCLUSION CRITERIA FOR THE USE OF PHOSPHATIDYLCHOLINE/DESOXYCHOLATE

- Pregnancy
- Patient during lactation period
- Autoimmune rheumatic illnesses
- Antiphospholipid Syndrome
- Febrile syndrome
- Areas with cancer precedents
- Soy allergy

MATERIAL AND METHODS

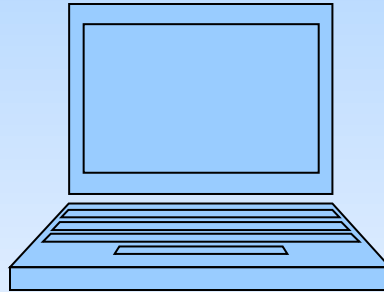
- **Medical History and Physical examination**
- **Ultrasonic Graphic patterns : thickness and echographic structure of the adipose tissue**
- **Three types of circumferences (supraumbilical, umbilical and infraumbilical) evaluated with an altimeter**
- **Blood and urine analysis (Total cholesterol/low-density lipoprotein/high-density lipoprotein /triglycerides levels/urine glycerol)**
- **Histological examination after the first ultracavitation in only 4 patients**

ANATOMOPATHOLOGY

Method for taking biopsy immediately after ultracavitation

- **Topical anesthesia for avoiding mistakes in biopsy**
- **Guided ultrasonographic biopsy of the adipose tissue**
- **Sample taking in vertical, oblique and parallel directions to the skin.**
- **Puncture pistol (tru cut type) with 10 cm length and 14 G**
- **Punch of 2 cm length**
- **The samples are 2 cm long and have a cylindrical form**
- **Formol conservation at 10%**
- **Stainig with H-E**

TECHNICAL SPECIFICATIONS OF THE ULTRASONIC DEVICE FOR DIAGNOSIS



- Echographer with a lineal transducer of 12 – 18 MHz
- 5 cm exploration depth
- 3 dynamic focus
- OMNI mode which lets multiply the ultrasound beam and improve the image resolution.

TREATMENT : LASTED ONE MONTH

ABDOMINAL AREA OF 20 CM²

THE FIRST AND THE THIRD WEEK



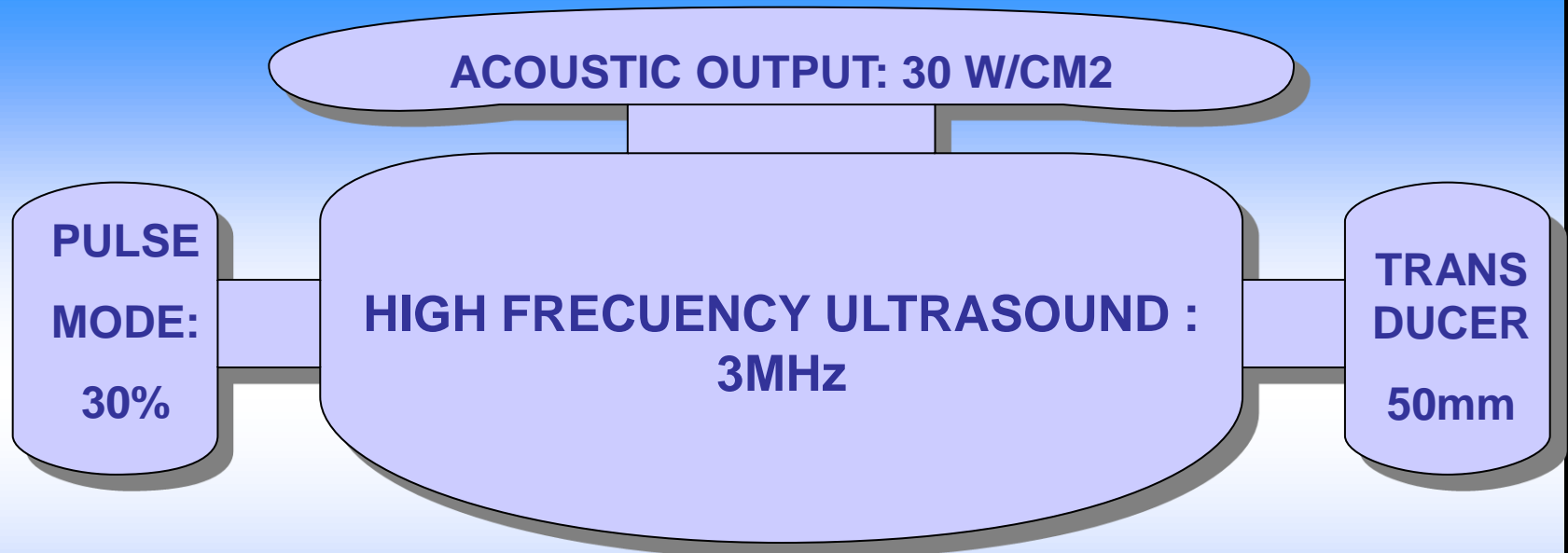
HIGH FREQUENCY AND POWER ULTRASOUND (3MHz/30W/cm²)

THE SECOND AND THE FOURTH WEEK



PHOSPHATIDYLCHOLINE/DESOXYCHOLATE(500mg/50mg)

TECHNICAL SPECIFICATIONS ABOUT THE APPLICATION OF THE ULTRACAVITATION



OPERATIVE METHODOLOGY ABOUT THE APPLICATION OF THE ULTRACAVITATION



COUPLE GEL : LIPOLYTIC (caffeine at 5 % and aminophylline at 2%): 60 gs



FREQUENCY : EVERY 15 DAYS

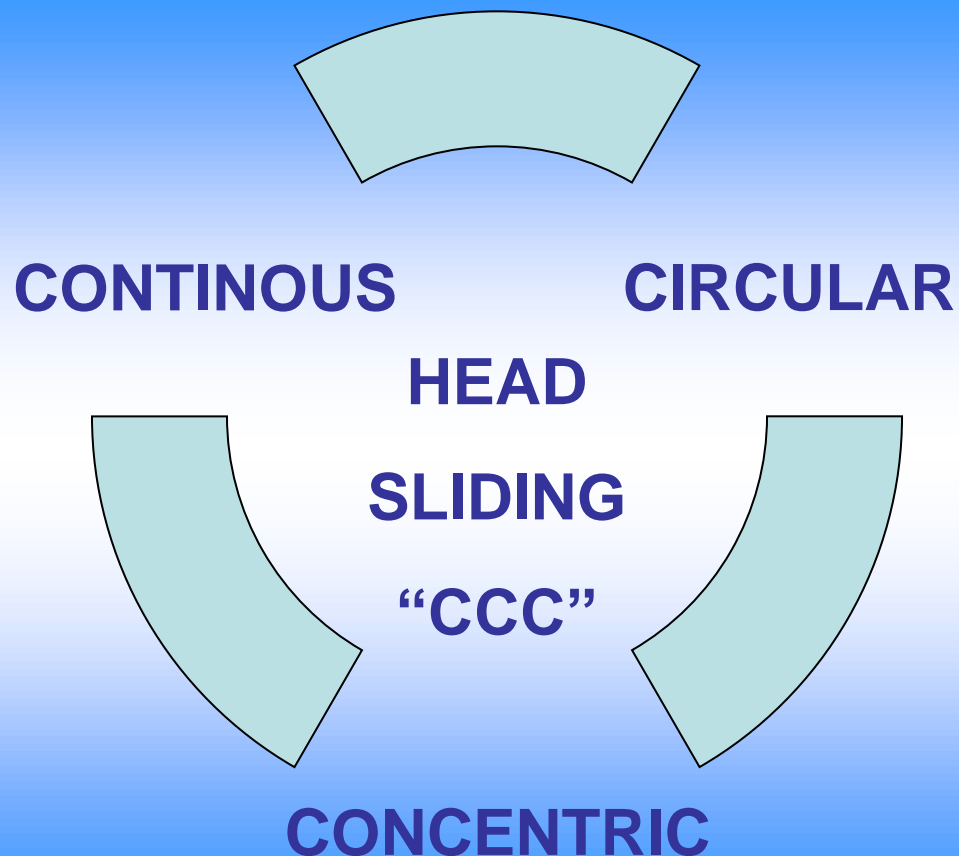


TIME : 20 MINUTES



ABDOMINAL AREA : 20CM2

OPERATIVE METHODOLOGY ABOUT THE APPLICATION OF THE ULTRACAVITATION





Before the ultracavitation



Operating the ultracavitation device

COLLATERAL EFFECTS AFTER ULTRACAVITATION

MILD TRANSITORY ERYTHEMA

OPERATIVE METHODOLOGY AND TECHNICAL SPECIFICATIONS ABOUT THE APPLICATION TECHNIQUES OF PHOSPHATIDYLCHOLINE/DESOXYCHOLATE

PHOSPHATIDYLCHOLINE 500mg / DESOXYCHOLATE 50 MG

ABDOMINAL AREA : 20 CM2

INITIAL MARKS

OPERATIVE METHODOLOGY AND TECHNICAL SPECIFICATIONS ABOUT THE APPLICATION TECHNIQUES OF PHOSPHATIDYLCHOLINE/DESOXYCHOLATE

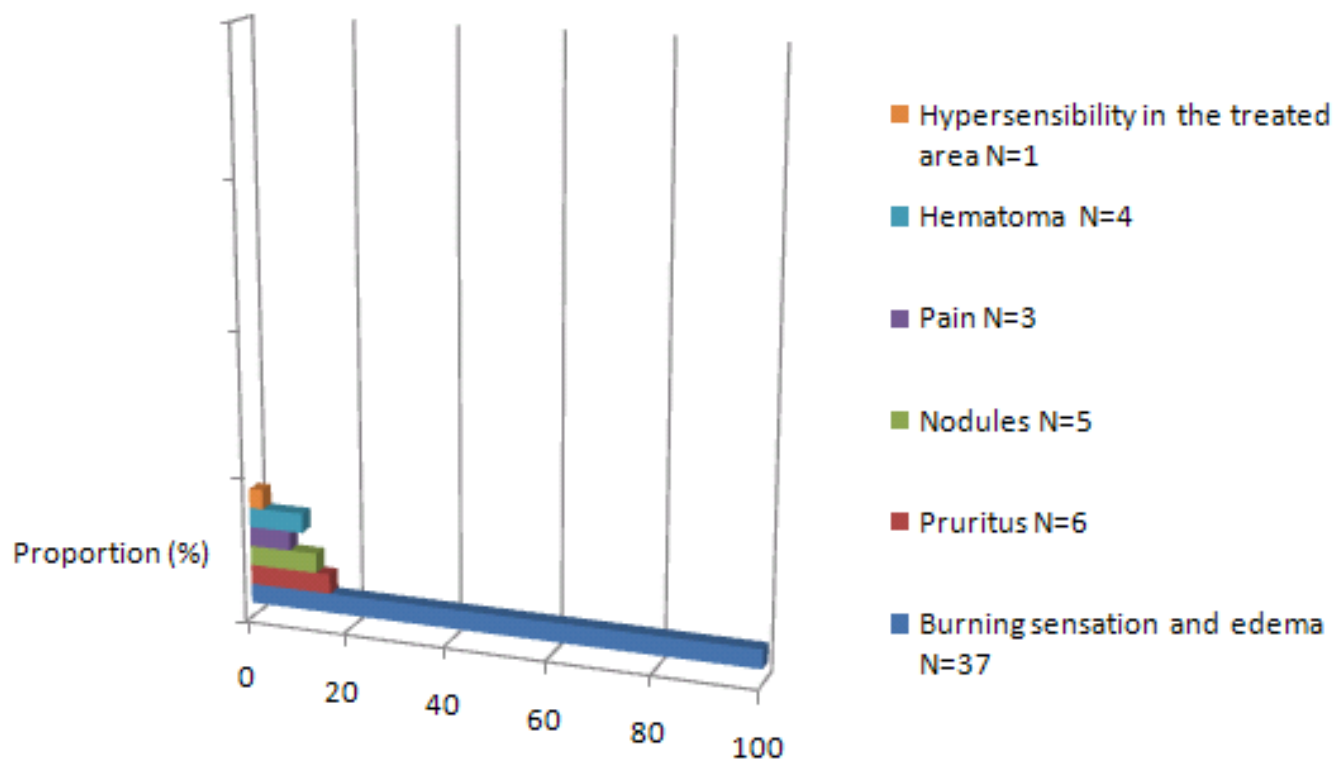
DISTANCE BETWEEN PUNCTURE : 1CM

APPLICATION DEPTH : 13 mm

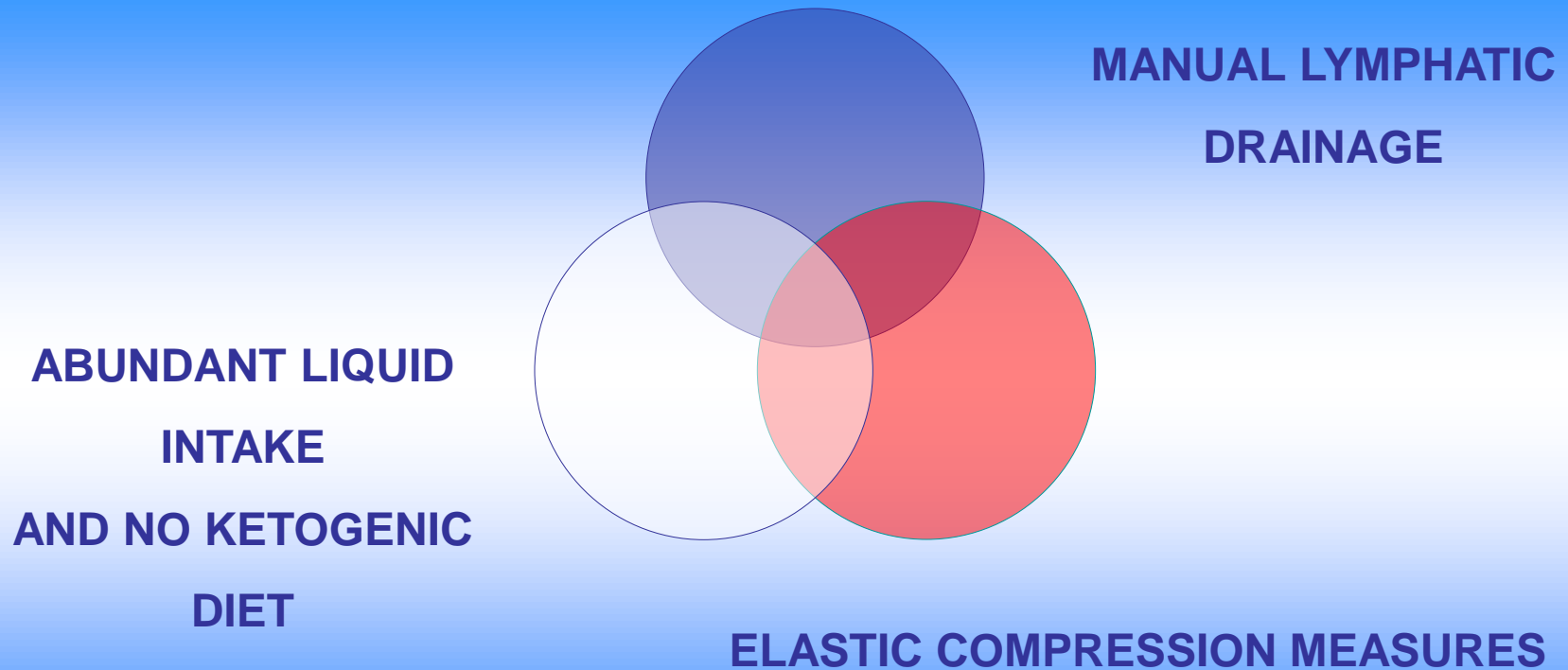
DOSE PER PUNCTURE : 0,1 ml

FREQUENCY : EVERY 15 DAYS

COLLATERAL EFFECTS AFTER THE APPLICATION OF PHOSPHATIDYLCHOLINE/DESOXYCHOLATE



SUBSEQUENT INDICATIONS FOR BOTH TREATMENTS



RESULTS

The patient's average circumferences were reduced
8.69 cm supraumbilical*
7.61 cm umbilical*
5.84 cm infraumbilical*

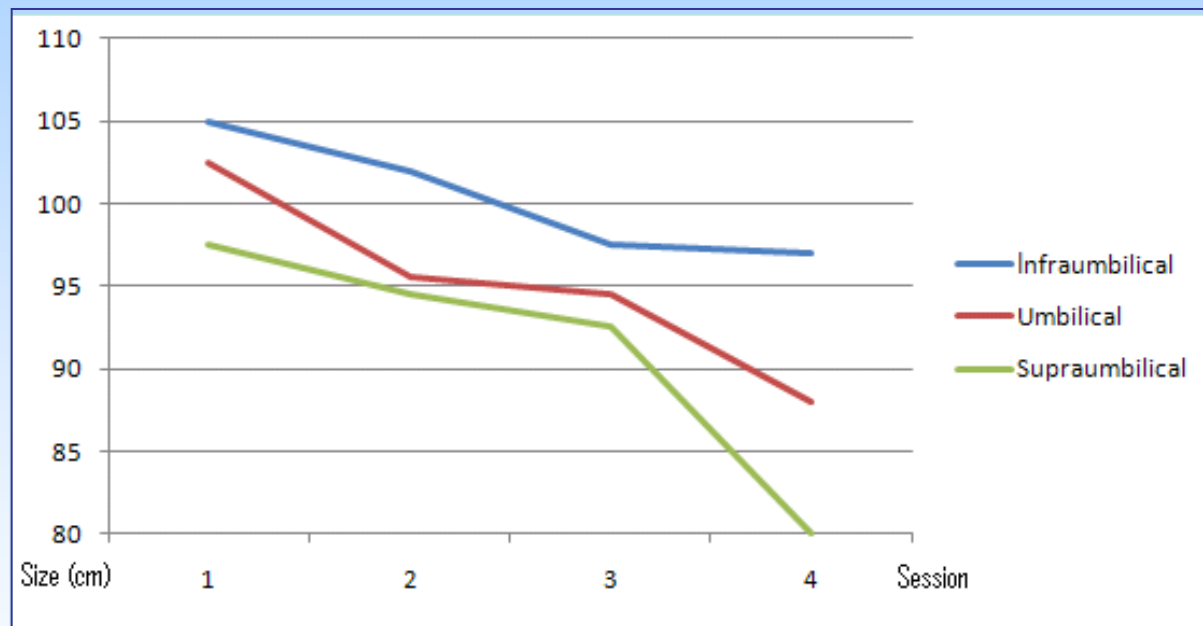
No significant changes of the patient's weight (+/- 500 gs)
*(after 25 days the last treatment)

All patients did not report any adverse effects
No significant changes in blood and urine levels

Better results in areas with adipose tissue with edema
The ecography showed that the adipose tissue's thickness had diminished
and modified its pattern

Anatomopathology confirmed that the adipose tissue was ablated in different points after cavitation

AVERAGE MEASURES DECREASEMENT

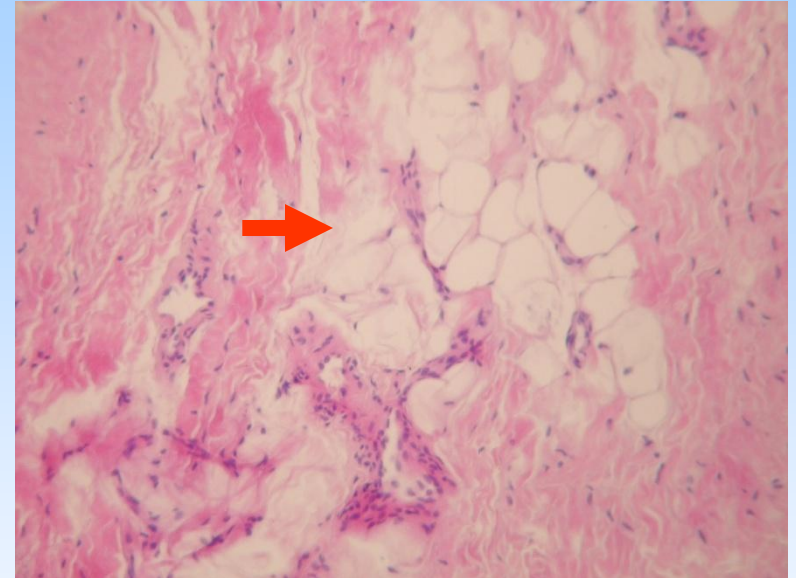
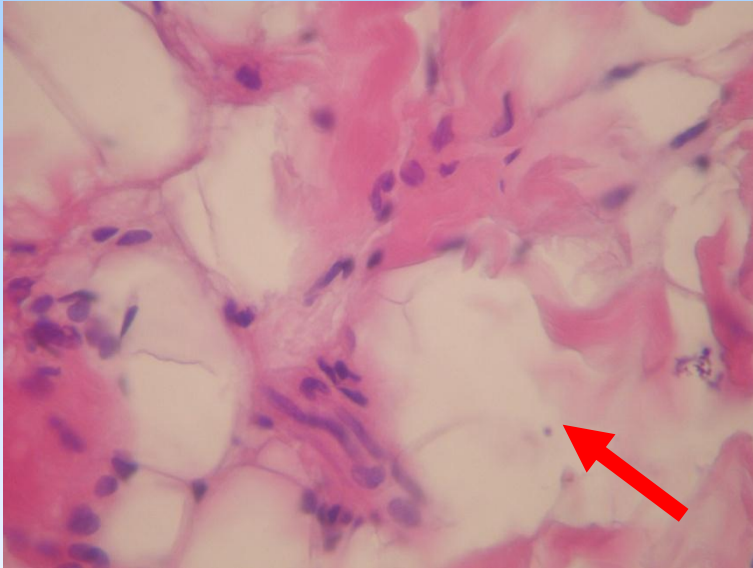


SUPRAUMBILICAL DIMINISHMENT : 8.69 cm

UMBILICAL DIMINISHMENT : 7.61 cm

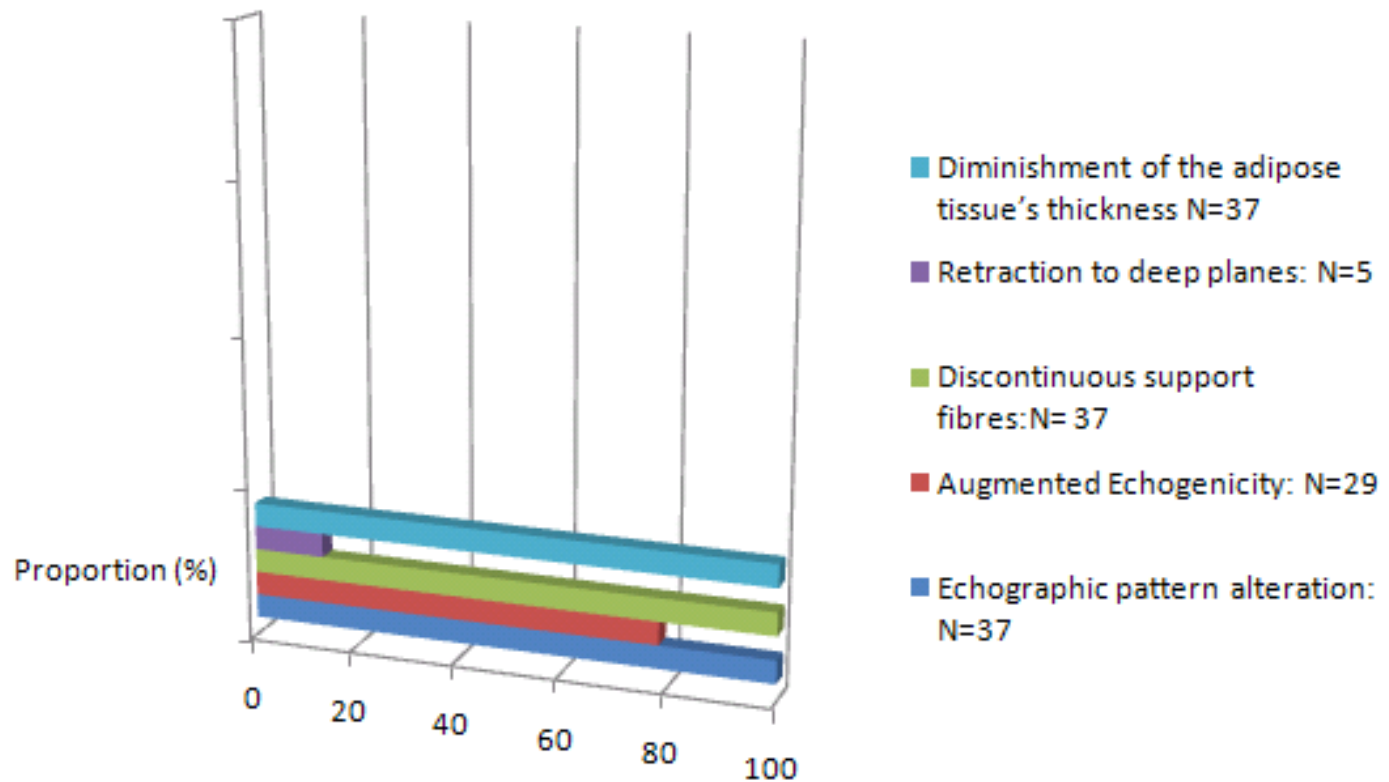
INFRAUMBILICAL DIMINISHMENT : 5.84 cm

ANATOMOPATHOLOGY RESULTS

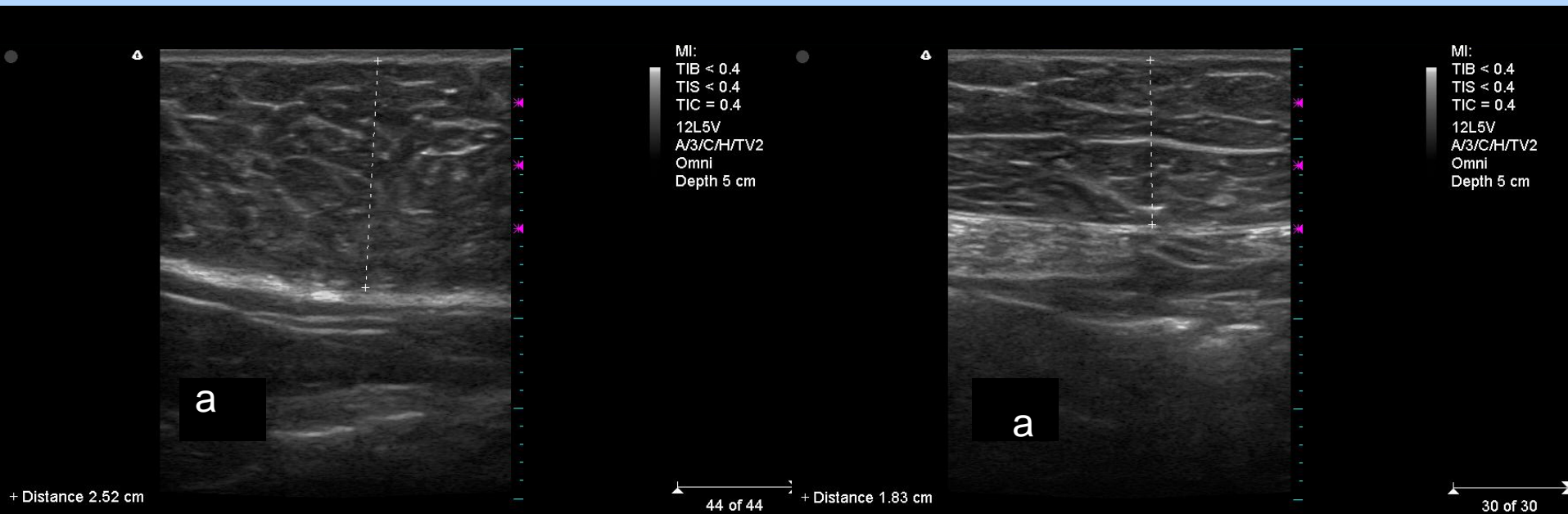


Histological examination confirmed that the adipose tissue was ablated in different points after cavitation

ECHOGRAPHIC RESULTS



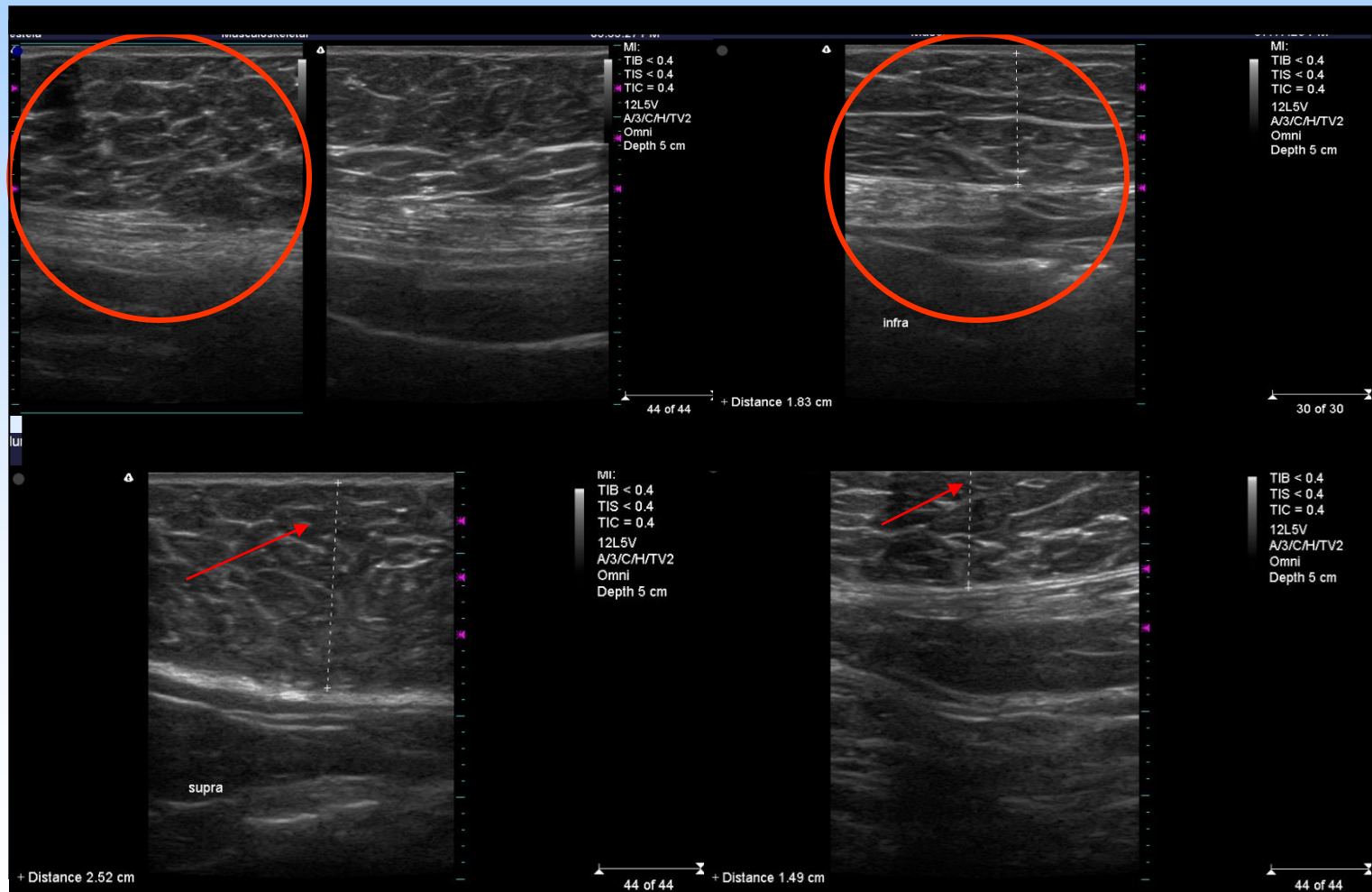
ECHOGRAPHIC PATTERNS RESULTS



BEFORE

AFTER

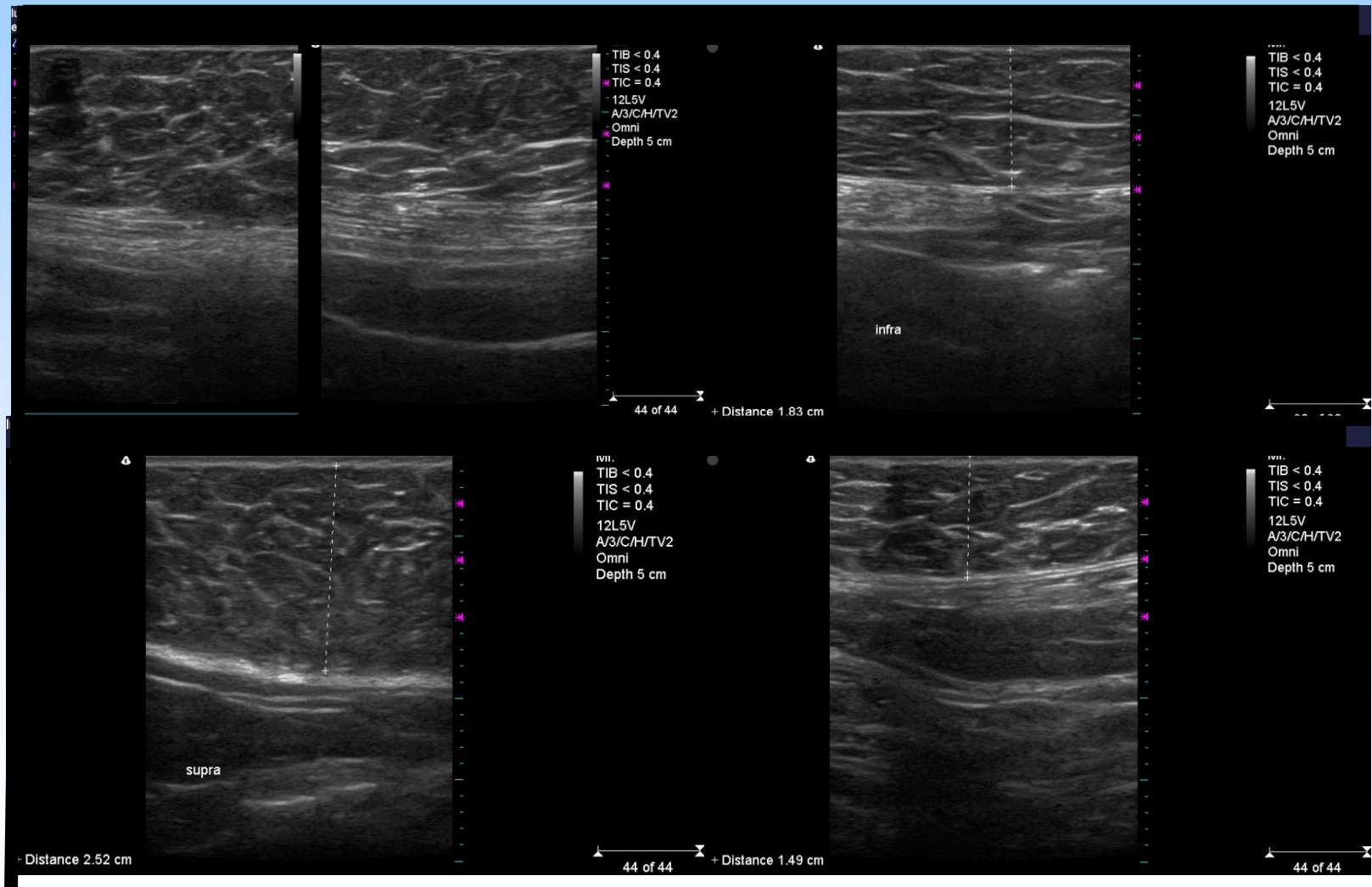
ECHOGRAPHIC PATTERNS RESULTS



BEFORE

AFTER

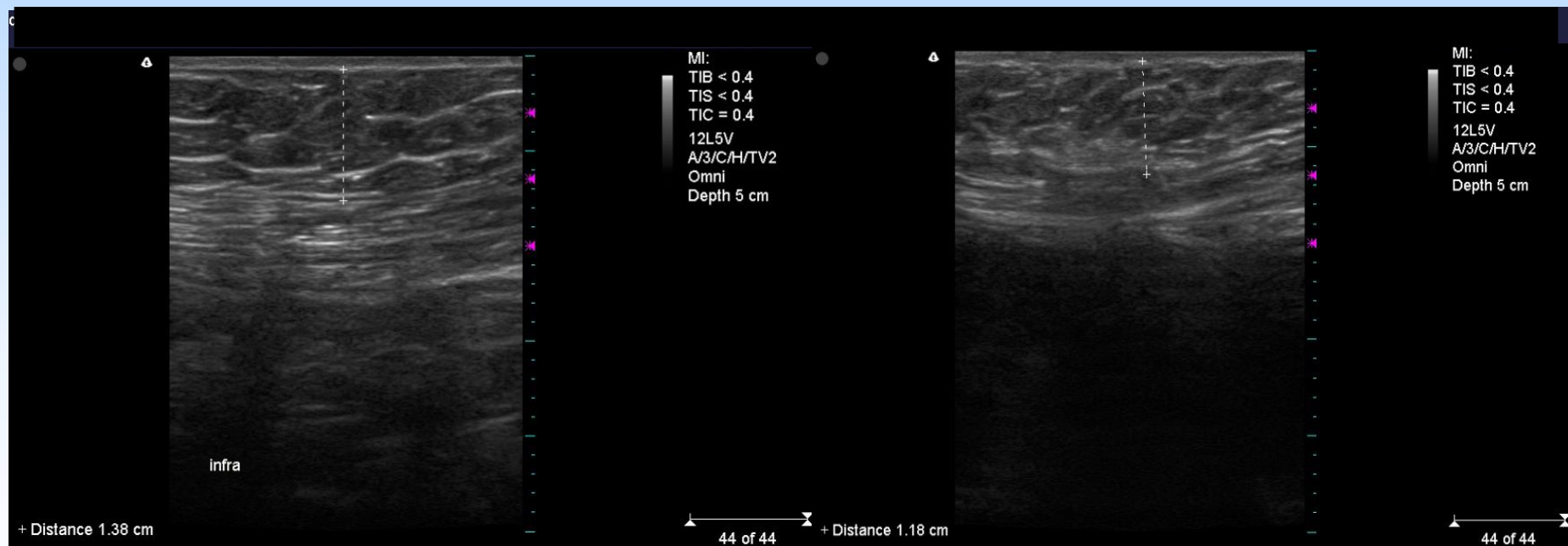
ECHOGRAPHIC PATTERNS RESULTS



BEFORE

AFTER

ECHOGRAPHIC PATTERNS RESULTS



AESTHETIC RESULTS



BEFORE



AFTER

AESTHETIC RESULTS



BEFORE



AFTER

CONCLUSION

- ★ **SAFE METHOD OF BODY SCULPTING: NON SURGICAL PROCESS**
- ★ **NO ADVERSE EFFECTS DURING THE FOLLOW- UP PERIOD**
- ★ **HIGH PATIENT SATISFACTION AFTER ONE MONTH OF TREATMENT**
- ★ **NO INCIDENCE IN THE PATIENT'S BIOCHEMICAL PROFILE**
- ★ **REDUCED PHARMACOLOGICAL RISKS**

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