

Prospective Cohort Comparative study of laser, ultrasound, and power assisted liposuction yields equivocal skin contraction of the torso

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No Disclosures

Background

- New technologies with skin tightening and fat removal have been introduced (Fodor, PRS 1998)
- A paucity of data remains demonstrating any difference in skin tightening due to new lipoplasty technology relative to traditional liposuction (DiBernado, ASJ 2010)

Background

MECHANISM OF ACTION

PAL™

rapid vibrations break up fat cells

VASER™

ultrasonic vibrating energy emulsifies

SmartLipo™

ruptures fat cells

SlimLipo™

liquefies unwanted fat

Objective

- The purpose of this pilot study was to obtain quantitative data for comparing skin contraction achieved by SlimLipo™, SmartLipo™, VASER™ and Power Assisted Liposuction™

Hypothesis

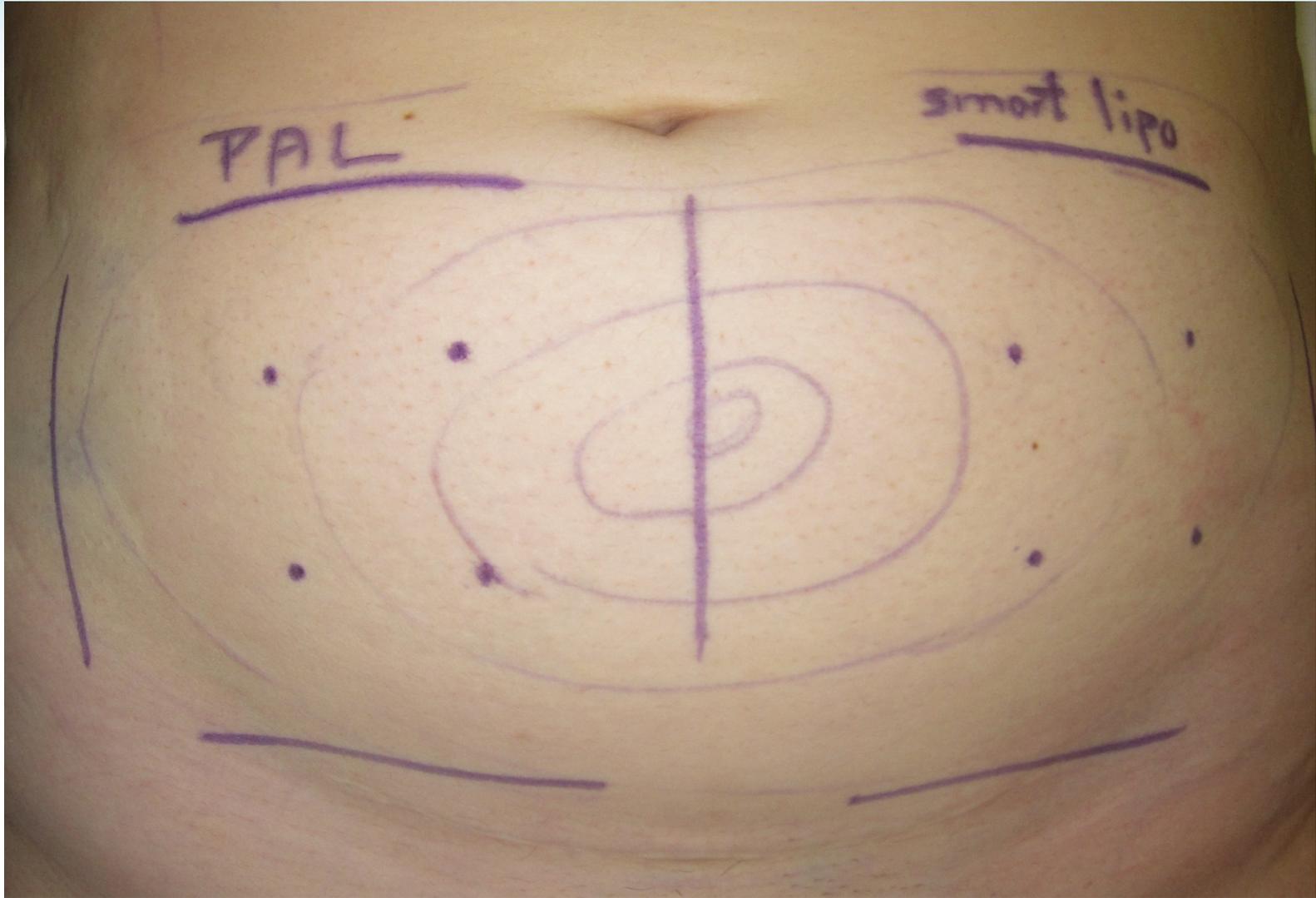
- We hypothesized that there may be a difference with skin tightening between the various techniques

Material and Methods

- Single Senior Surgeon's Experience
- Eight female patients (2 per technique)
- A 5 cm grid was mapped with a 5-0 prolene on the flank, upper and lower abdomen of each patient
- Measurements were taken:
Baseline, Six weeks, Three months

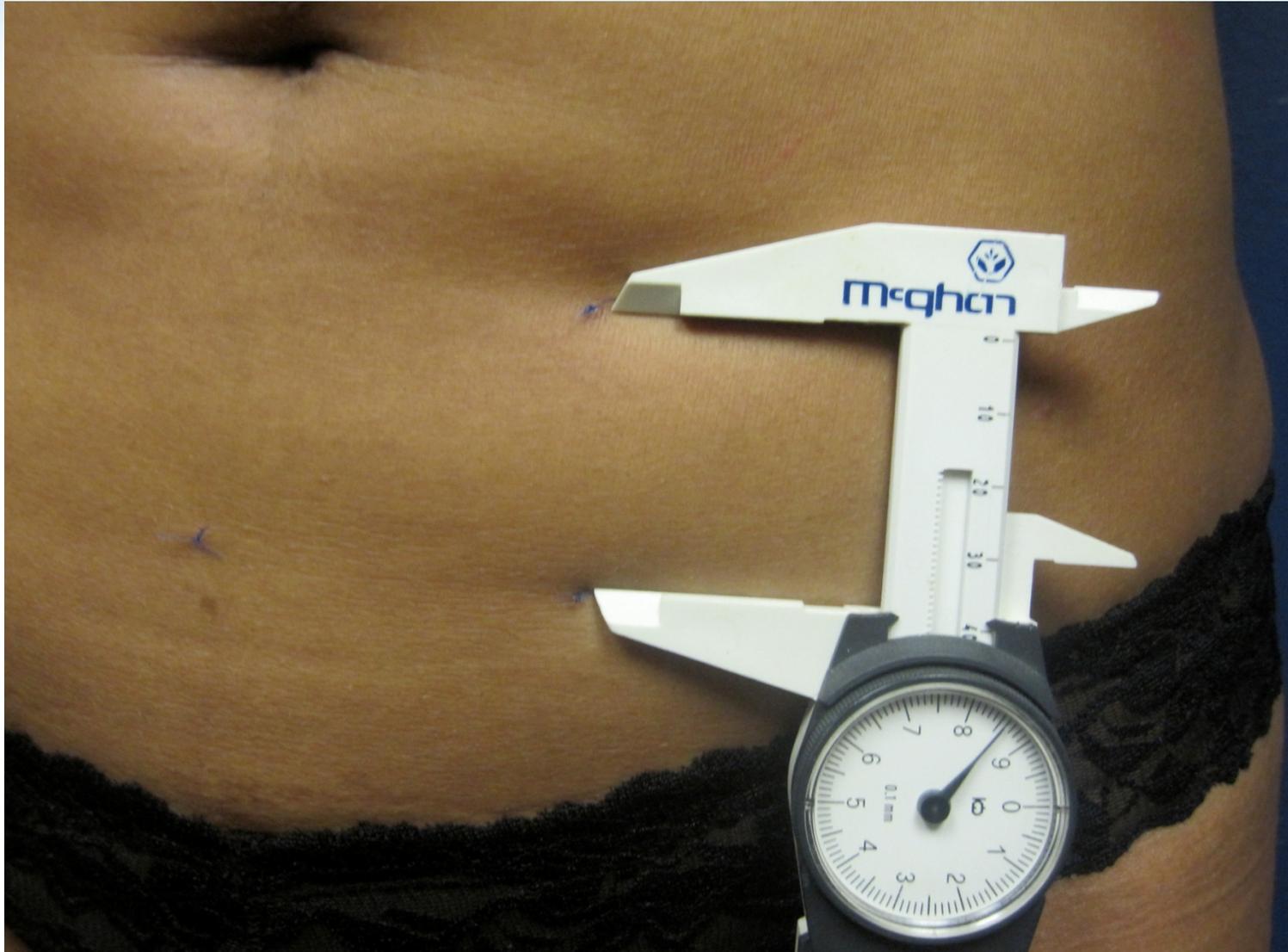
Material and Methods

- Age range of 25-35 were followed over a three month period who underwent
 - PALTM (micro-air),
 - 3rd generation ultrasonic device VASERTM (sound surgical)
 - SlimLipoTM (924 nm/975 nm)
 - SmartLipoTM (1064 nm)









Results

- At three months postoperatively, the average skin tightening reduction in the designated areas was 22 %
- No statistically significant difference ($p = .016$) observed in laser (two different wavelengths), ultrasonic or mechanical liposuction procedures

Average Skin Tightening Reduction

Abdomen Flank Vertical (cm)	Abdomen Upper Vertical (cm)	Abdomen Lower Vertical (cm)
SlimLipo 4.3	SlimLipo 4	SlimLipo 3.7
SmartLipo 4	SmartLipo 3.4	SmartLipo 3.3
VASER 3.8	VASER 3.5	VASER 3.3
PAL 4.2	PAL 3.4	PAL 3.5

Average Skin Tightening Reduction

Abdomen Flank Horizontal (cm)	Abdomen Upper Horizontal (cm)	Abdomen Lower Horizontal (cm)
SlimLipo 4.1	SlimLipo 4.2	SlimLipo 3.5
SmartLipo 4.3	SmartLipo 4.3	SmartLipo 3.6
VASER 4.3	VASER 4.0	VASER 3.8
PAL 4.4	PAL 4.2	PAL 4.2

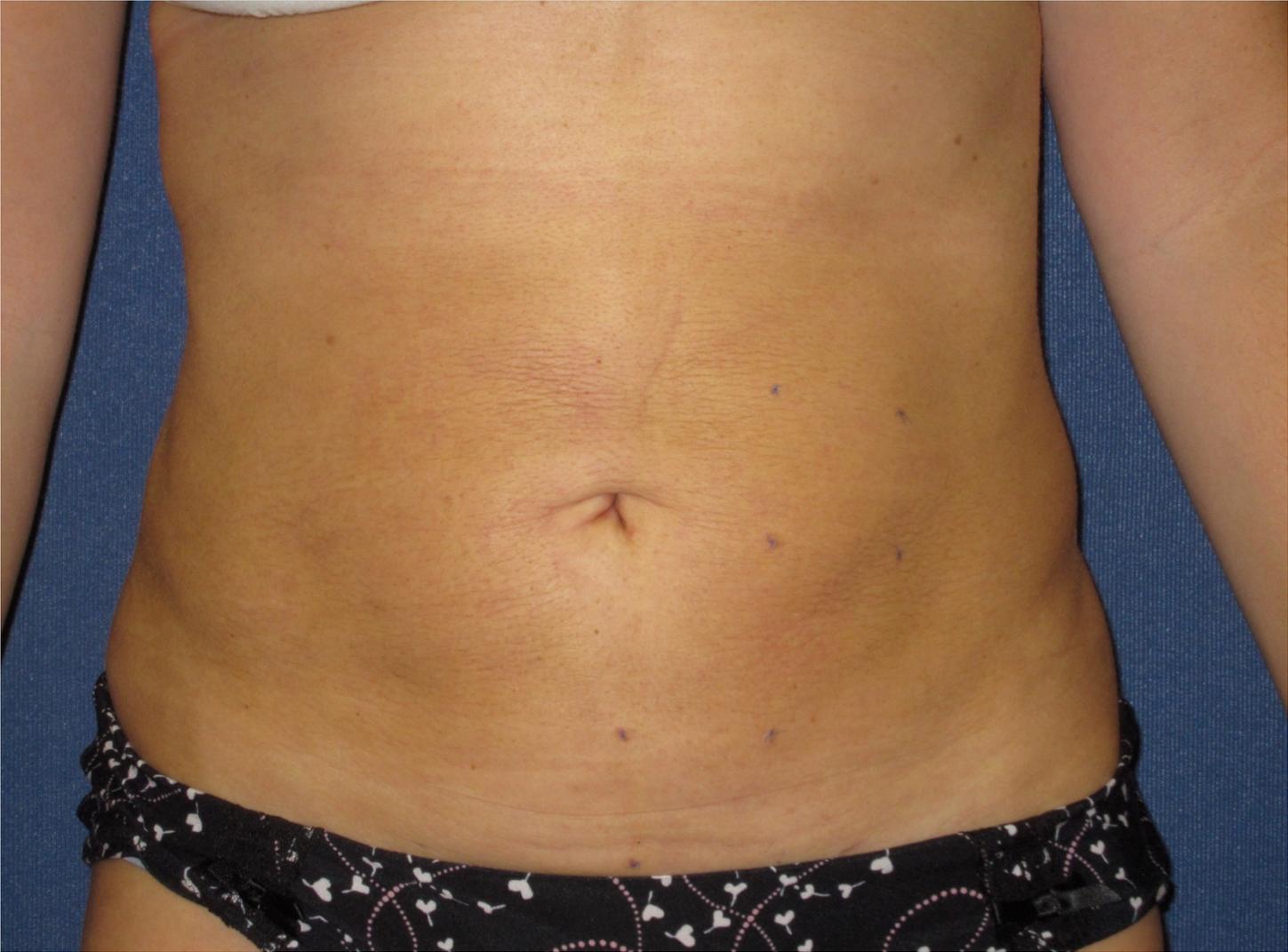




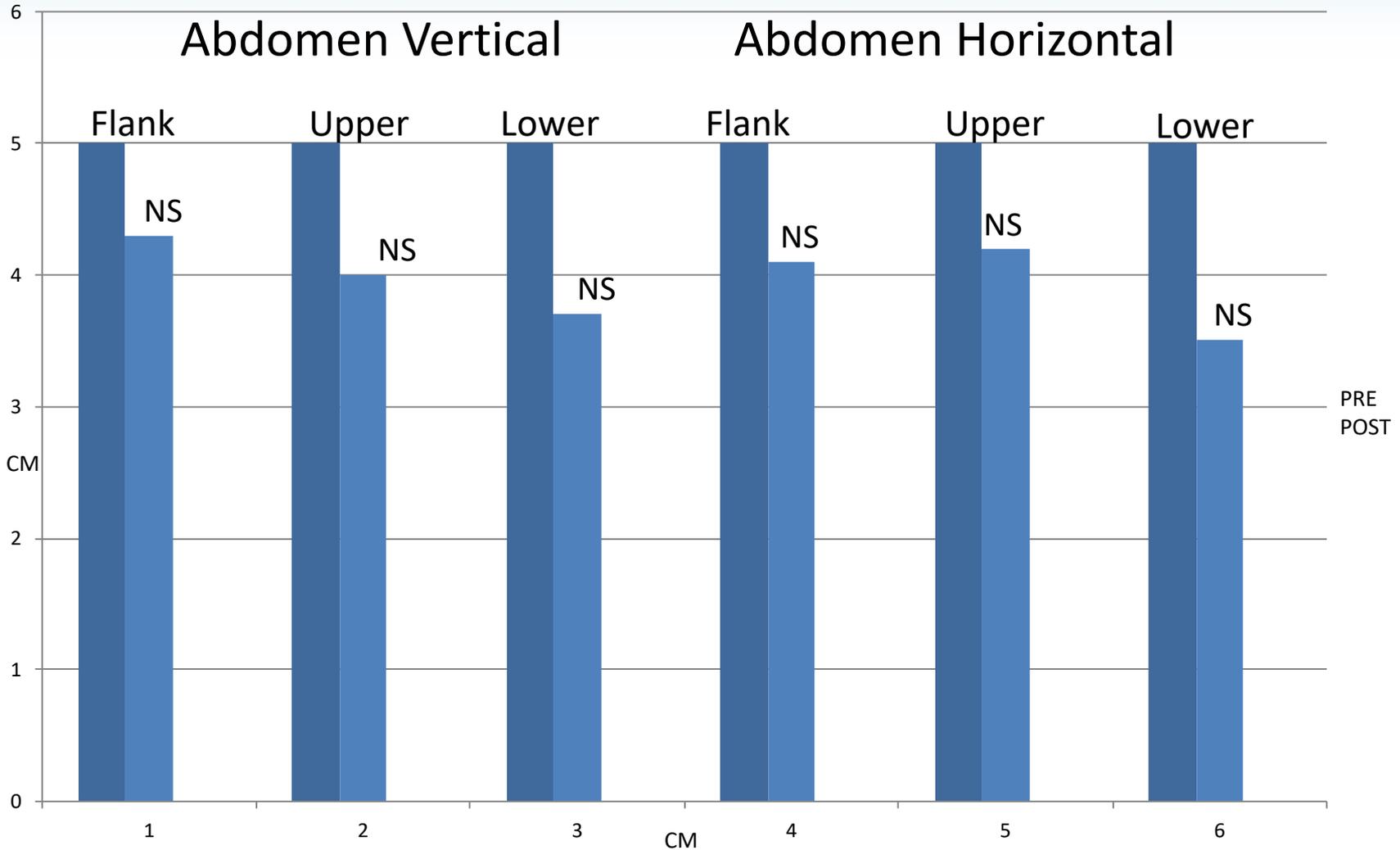




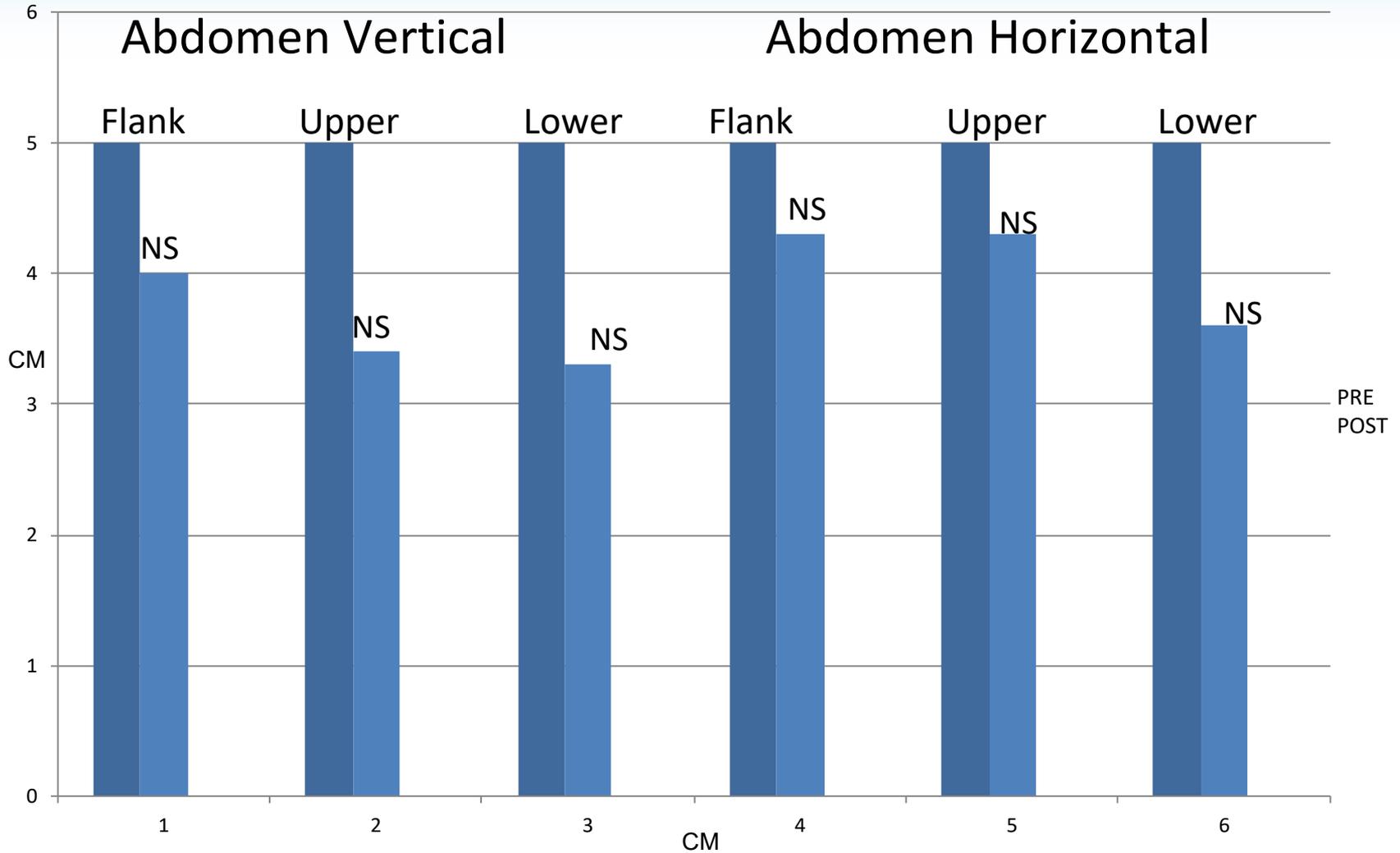




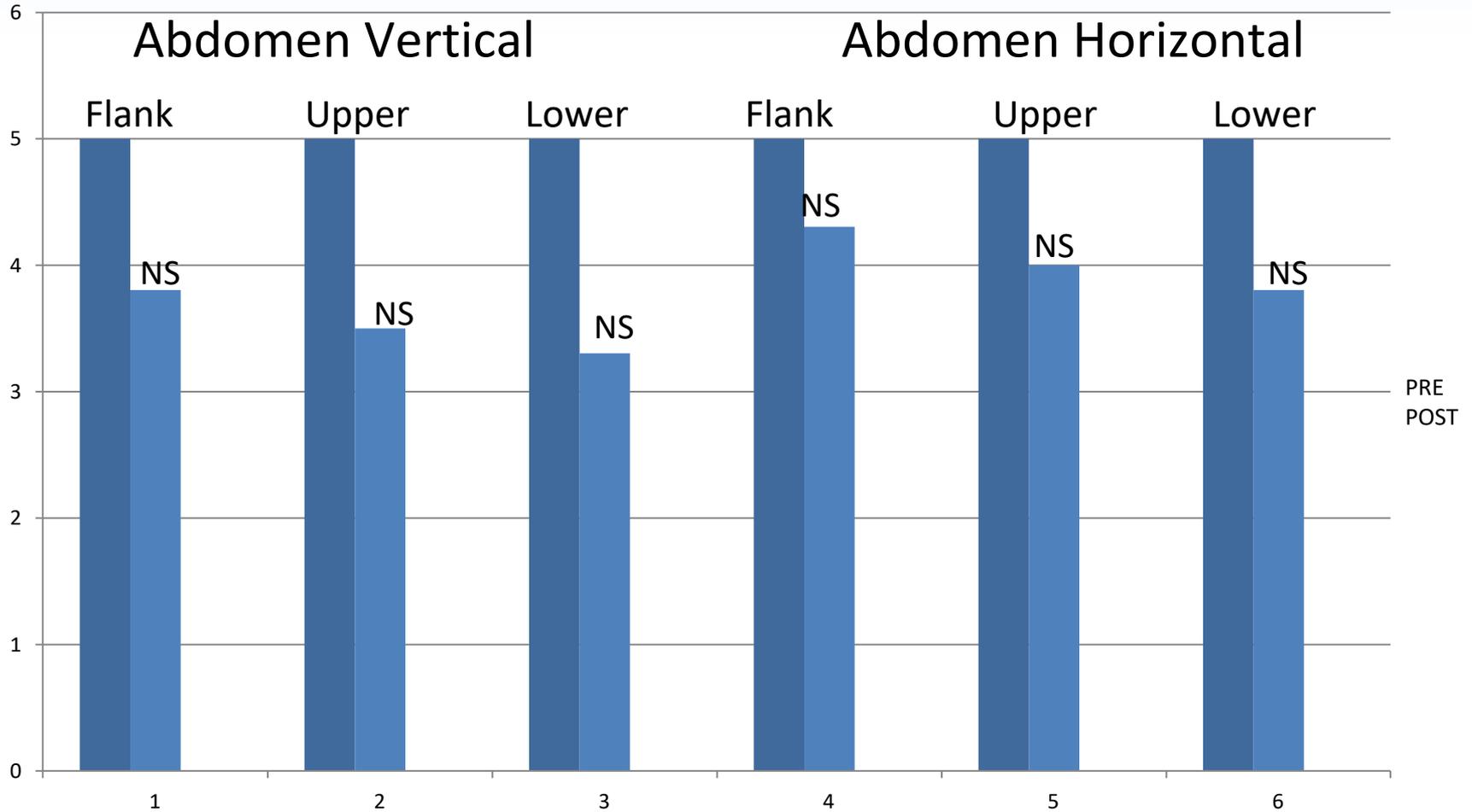
SlimLipo



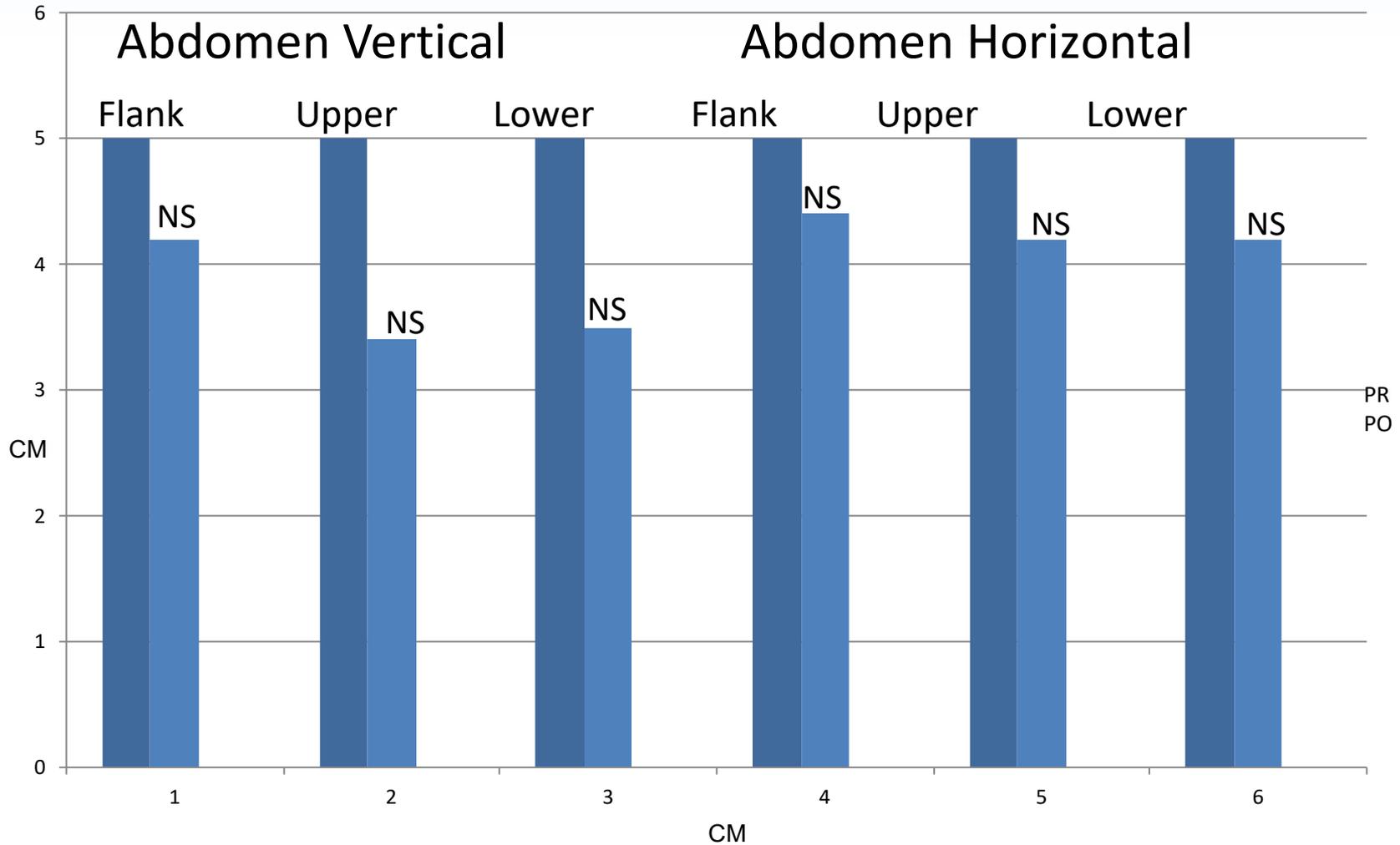
SmartLipo



VASER



PAL



Conclusions

- There is an overall skin contraction of all modalities of liposuction without any statistical difference
- We recommend a larger study of patients to ascertain whether there are statistical significant differences between these various techniques



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