



## GUEST ENTRY FROM ISAPS GOLD GLOBAL SPONSOR:



### **Skin retraction with Vaser® Liposuction**

This article discusses skin retraction with Vaser ultrasound-assisted liposuction (UAL), as a body contouring procedure, specifically for older patients. In a study with 40 patients (age ranging from 50 to 67 years old) we evaluated the extent of skin retraction achieved in adults using subdermal Vaser Liposuction as the sole technology.

Skin retraction, or contraction, induced by Ultrasonic-Assisted Liposuction (UAL) relies on a specific biological principle. Watts, Grillo, and Gross (1958) demonstrated that the primary contractile elements are located at the dermal-subdermal interface<sup>2</sup>. A prerequisite to achieving skin retraction is the ability to homogeneously defat the subdermal fat layer without interfering with connective structures and vascular supply. The subdermal fat layer is delicate and challenging to manipulate.

Vaser ultrasound-assisted liposuction (UAL) applies acoustic energy via an ultrasonic probe which induces rapid bubble formation and collapse within tumescent fluid, dislodging intact fat cells. Vaser UAL emulsifies only the adipose tissue, creating a suspension of fat cells, whilst preserving connective structures, elastic fibers, and the vascular network, thereby enhancing tissue selection.

By reducing the subdermal thickness through controlled ultrasound defatting, myofibroblasts are exposed, thereby enhancing skin contraction<sup>2</sup>. It allows the skin to naturally retract and re-drape to the underlying frame during the healing process<sup>3</sup>. The preservation of connective tissue is also a key factor plasma gas sources utilize for skin tightening after Vaser UAL.

In our study, we presented results of 40 patients (35 females and 5 males, age ranging from 50 to 67 yo) treated with only VASER UAL. We selected older candidates for the study due to the increased difficulty of achieving skin retraction in this population. Skin retraction was evaluated objectively by measuring the shrinkage of the treated areas using microdot tattooing with India Ink. Results at six months post-operation show the enhancement of skin retraction achieved with the sole use of UAL, despite the presence of skin laxity.

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Skin retraction did vary from 12% to more than 30%, depending on areas. On average, skin retraction in upper arms was 27%, in the abdomen was 25%, in the flanks was 15%, in the back was 21% and in the inner thighs was 10%.

The conclusion from the study<sup>1</sup> conducted was that enhancement in skin retraction was obtained with Vaser ultrasound-assisted liposuction (UAL), as a body contouring procedure, despite laxity of skin.

## References

1. Full publication of the study in: A. Di Giuseppe, F. Giovagnoli. Enhanced Skin Retraction in Body Contouring in Adults with Sole VASER Ultrasound Assisted Liposuction. JOURNAL OF ADVANCED PLASTIC SURGERY; 2024, Vol. 9
2. John Marquis Converse: Reconstructive Plastic Surgery Second Edition 1977. 78-103.
3. Prendergast PM. Body contouring with ultrasound-assisted lipoplasty (VASER). In: Prendergast PM, Shiffman MA, eds. Aesthetic Medicine: Art and Techniques. Berlin: Springer; 2011:465-508.



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