

An Introduction to HIFU

High Intensity Focused Ultrasound

Overview

The **HS-510 HIFU** System is designed for anti-ageing, face lifting, body contouring and sculpting without surgery, bleeding or scarring.

The HS-510 System uses **HIFU technology**, which is NOT like Laser, Fraxel, radio frequency, IPL, needling, or any other surgical, or non-surgical, 'face lift' skin rejuvenation procedure.

HIFU is the next generation in advanced facial rejuvenation with deeper penetration, visible longer lasting results ... AND most importantly, NO damage to the skin surface.

What is HIFU and how does it work ?

Ultrasound

Ultrasound is an oscillating sound pressure wave, created by a very rapid vibration, with a frequency greater than the upper limit of the human hearing range. Ultrasound is used in many different fields, having different effects – in the area of surgery, and now skin lifting, the **thermal** effect of Ultrasound is the key ... when focused, the high intensity vibrational energy of the Ultrasonic wave is turned to heat; this is the principle of **HIFU**.

HIFU

HIFU applies **High-Intensity Focused Ultrasound** energy to locally heat a precise area of tissue. The Ultrasound beams are focused on a specific (fractional) point, and due to the significant energy created at that point, the temperatures within that area of tissue instantly rise to 60°~70°C, causing protein denaturation and cell ablation (destruction).

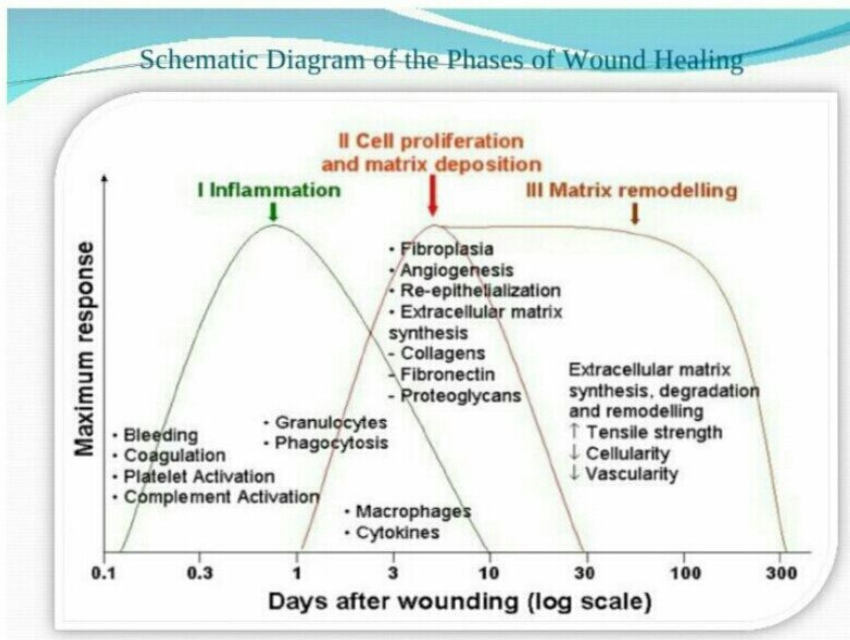
HIFU skin treatment mechanism

In a skin treatment the HIFU (High Intensity Focused Ultrasound) penetrates through the surface of the skin to deliver the precise and fractional focused ultrasound energy at the right depths (@ 3.0mm Connective tissue / @ 4.5mm SMAS layer), and at the right temperature (60~70°C), without damaging or disrupting the epidermal tissue (surface) of the skin.

	HIFU	RF	Laser
Temperature	60-70°C Denaturation	<55°C, Sub-Optimal	100°C Vaporization
Depth	4.5mm, 3.0mm	<3mm, Variable	<1.5mm, superficial
Precision	Precise & Fractional	Bulk Heating	Precise & Fractional
Dermis			
Fat/Connective Tissue			
3.0mm			
4.5mm			
SMAS Muscle			

The **HIFU** targets the connective tissue stimulating collagen synthesis (via the wound healing response), improving skin texture, reducing wrinkles and firming.

The treatment also specifically targets the SMAS (superficial muscular aponeurotic system) – this deeper layer is responsible for muscular activity in the face



By stimulating the SMAS layer, there is both a wound contraction in the muscle, and new collagen synthesis, which over the next 4 to 6 weeks naturally uplifts and firms the skin.

This process of new collagen regeneration continues as the extracellular (collagen) matrix is gradually but continually re-formed and remodelled; this effect can be seen firming and lifting the skin over the next 6 months after the treatment.

Summary explanation of how HIFU technology works ...

The fundamental principle of HIFU is similar to using a magnifying glass to focus sunlight, generating a burning heat that can set a piece of paper on fire.

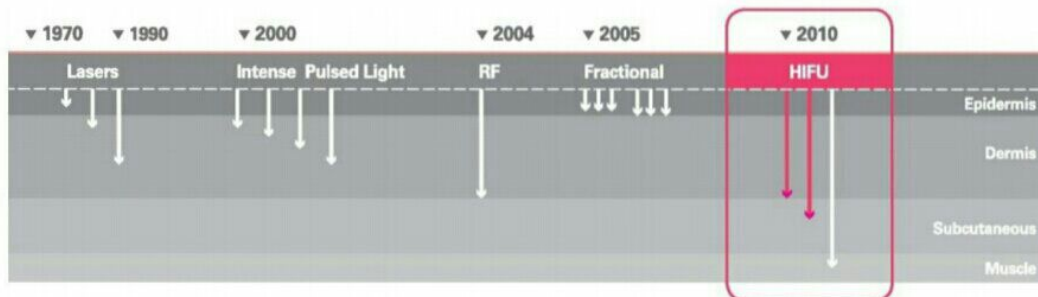
Focused ultrasound uses an acoustic lens to concentrate multiple intersecting beams of high frequency ultrasound precisely on a target point in the skin.

Each individual beam passes through skin tissue with no effect (just like a normal ultrasound scan); but at the focal point, where the beams converge, the combined ultrasound energy has an intense and precise thermal (heating) effect.

The instant temperature rise (60-70 °C) creates a fractional 'wound' dot in the skin; this 'micro-wound' causes an instant muscle contraction, and, as it is repaired by the surrounding tissue and muscle, the new collagen matrix is created.

The on-going repair process has a lasting, firming and lifting effect on the skin.

Evolution of paramedical skin treatment technologies



HIFU Applications and key benefits

HIFU Applications :

- Skin firming and rejuvenation (anti-ageing)
- Non-invasive lifting for the face ~ an 'uplift' rather than a 'face lift'
- Body contouring and tightening

Key client benefits :

1. Lift eyebrows and tighten brows
2. Reduce frown lines
3. Lift and firm jowl area
4. Soften smiles lines
5. Reduce nasolabial folds
6. Improve appearance of neck
7. Body sculpture / Body contour



The **HIFU (High Intensity Focused Ultrasound)** beams through the surface of the skin to deliver precise and fractional ultrasound energy to the deeper dermis, subcutaneous tissue and muscle layers;

This energy stimulates both **muscle firming** and **new collagen** production, with no disruption to the outer skin surface (no scarring).

FACIAL BENEFITS :

1. Lift and tighten eyebrows
2. Reduce frown lines
3. Lift and firm the chin / jaw area
4. Lift and tighten the cheeks
5. Reduce nasolabial folds
6. Lift and tighten the neck area

HIFU FACIAL REJUVENATION				
TREATMENT AREA	# LINES	Treatment Duration		Treatment Cost
THROAT / NECK	~ 180	¾ hr		\$ 1,100.-
CHIN / JAW LINE	~ 100	½ hr		\$ 550.-
CHEEKS	~ 180	¾ hr		\$ 1,100.-
EYES / FOREHEAD	~ 140	¾ hr		\$ 1,100.-
FULL FACE & NECK	~ 600	2½ hrs	normally	\$ 3,850.-
	FULL FACIAL UP-LIFT SAVE \$ 1,100.- ** SPECIAL **			\$ 2,750.-

"Looking more and more youthful every day !!! ...

... my face and neck loves you so much !! Justine xxxxx