

## The use of ultrasound for cosmetic fat reduction

### 1. What is the difference between internal and external ultrasound for cosmetic ultrasound applications?

The procedures ...

- a.) operate with the same instruments but at different frequencies.
- b.) represent invasive and non-invasive techniques, respectively.
- c.) are carried out in special, approved bodies, or they can be performed by any beauty salon, respectively.
- d.) are considered under different accounting mechanisms by insurance companies.

### 2. What are radial shock waves?

Radial shock waves ...

- a.) are waves that produce a special pain therapy.
- b.) are produced by special pneumatic transducers.
- c.) spread in the body starting from the center propagating radially outwardly.
- d.) are generated by Lithotripters with appropriate external delay lines.

### 3. What mechanisms are responsible for the reduction of adipose tissue?

- a.) The fatty tissue in the ultrasound focus will be evaporated.
- b.) The effect is due to thermal mechanisms only.
- c.) The effect is mainly due to placebo effects.
- d.) The mechanisms of action are still insufficiently studied.

### 4. What role does HIFU play with regard to cosmetic applications?

- a.) By focusing of the sound waves such that small fat pads in particular can be removed.
- b.) Because of the intense research work on HIFU this technique can be used in particularly critical cases.
- c.) HIFU is more suitable for the remodelling of tissues than for drastic fat reductions. HIFU can also positively affect connective tissue and skin.
- d.) HIFU is particularly suitable for critical regions in the abdomen.

### 5. What risk does cosmetic ultrasound present for patients?

- a.) There are no prospective studies that clearly exclude the risk by ultrasound.
- b.) Treatment of patients in certified facilities is absolutely safe.
- c.) The treatment is completely safe, unless pregnant women are exposed.
- d.) Men are generally less at risk than women.

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### Correct answers:

- 1b: represent invasive and non-invasive techniques, respectively
- 2b: are produced by special pneumatic transducers
- 3d: The mechanisms of action are still insufficiently studied.
- 4c: HIFU is more suitable for the remodelling of tissues than for the drastic fat reductions. HIFU can also positively affect connective tissue and skin.
- 5a: There are no prospective studies that clearly exclude the risk by ultrasound.