



**AWT<sup>®</sup> – Acoustic Wave Therapy**  
for the treatment of facial wrinkles and cellulite



Treatment of cellulite

## What is Acoustic Wave Therapy (AWT®)?

Today, acoustic waves are used with great success in pain therapy for the treatment of enthesopathies. Recent studies<sup>1,2,3,4</sup> have shown that acoustic waves produce biological effects that stimulate metabolic processes and improve connective tissue elasticity when used in aesthetic medicine. The fields of application of radial AWT® include the treatment of cellulite, facial wrinkles, striae/stretch marks and other conditions.

### Biological effects

- Stimulation of microcirculation (blood/lymph)
- Improvement of tissue elasticity
- Stimulation of cellular metabolism (improved cell membrane permeability)
- Stimulation of stem cells
- Release of growth factors

### Benefits of AWT®

- Non-invasive
- Short treatment time
- Suitable for all types of skin, including sun-tanned skin
- Initial improvements possible after only one treatment, depending on skin type and indication

Treatment of cellulite



Skin tightening



Treatment of facial wrinkles





Treatment of facial wrinkles

## Treatment of facial wrinkles with acoustic waves

The skin begins to age in our mid-20s. The connective tissue stores less moisture and cell production slows down. Wrinkles are the result of the reduced elasticity of the dermal fibres. The tissue tone decreases for which collagen fibres are responsible. The effects of this process are most obvious in our face. The notorious deep nose/cheek wrinkles, drooping jowls, sagging skin below the chin, forehead wrinkles and fine lines around the mouth, cheeks and eyes appear.

During AWT® treatment, acoustic waves are gently introduced into the body through the skin surface. Acoustic waves stimulate fibroblasts deep within the skin to resume collagen and elastin production. They promote cell renewal to improve skin density and elasticity, making the skin look firmer and smoother. This is a very good skin treatment for the face and chin area.

The non-invasive procedure is ideal for treating facial wrinkles and improving skin firmness on the abdomen, upper arms and thighs, for example. Before/after comparisons by diagnostic ultrasound imaging enable monitoring of the treatment effectiveness.

### Treatment of facial wrinkles

Before AWT®

After AWT®



Source: SHOCKWAVE FRANCE/TEROC, Paris, France

### Treatment of facial wrinkles

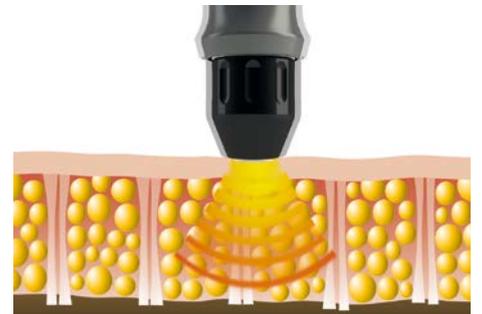
Before AWT®

After AWT®



Source: SHOCKWAVE FRANCE/TEROC, Paris, France

### Acoustic wave irradiation into the skin





### Handpieces for aesthetic treatments

- V-ACTOR® handpiece for vibration therapy to complement AWT®
- D-ACTOR® »ultra« handpiece with on-board buttons & display
- D-ACTOR® »classic« handpiece

## Improving cellulite with acoustic waves

The typical orange peel or mattress appearance of cellulite affects 90% of all women. Cellulite is caused by the parallel structure of the collagen fibre bundles, which makes it easy for the fat cells to bulge straight upwards towards the skin surface. In addition to this, reduced microcirculation causes fibrosclerosis in the connective tissue, which exacerbates the condition.

Acoustic waves reduce existing metabolic regulation disorders and stimulate fat breakdown in connective tissue fibres and improve the skin tone, thus decreasing the visible signs of cellulite and the appearance of dimples and bumps. Several clinical studies<sup>1,2,3,4</sup> have been conducted using the D-ACTOR® handpiece to assess the effects

of radial AWT® under controlled, standardized treatment conditions. During the studies, skin elasticity increased continually over a period of three months.

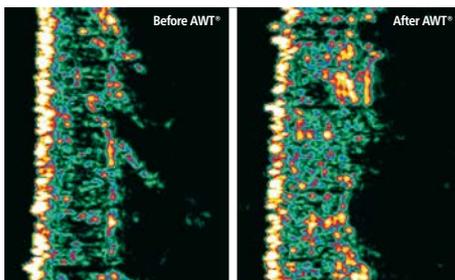
<sup>1</sup> Christ, C. et al.: Improvement in skin elasticity in the treatment of cellulite and connective tissue weakness by means of extracorporeal pulse activation therapy. *Aesthetic Surgery Journal*, 2008, 28(5).

<sup>2</sup> Adatto, M. et al.: Controlled, randomized study evaluating the effects of treating cellulite with AWT/EPAT. *Journal of Cosmetic and Laser Therapy*, 2010, 12(4).

<sup>3</sup> Steinert, M. et al.: Efficacy and safety of AWT in anti-cellulite treatment. *PRIME Journal*, July/August 2013.

<sup>4</sup> Russe-Wifflingseder, K. et al.: Placebo controlled, prospectively randomized, double-blinded study for the investigation of the effectiveness and safety of the acoustic wave therapy (AWT®) for cellulite treatment, *Journal of Cosmetic and Laser Therapy*, 2013, 15(3).

**Before AWT®: the corium/subcutis interface appears as a broken, irregular line. After AWT®: the skin tissue has become measurably more compact; anechoic interspaces (black) have decreased.**



Source: Dr. Christ, Zürich, Switzerland

**Treatment of cellulite Before AWT®**



**After AWT®**

