



RESULTS OF EXAMINATIONS WHICH WERE CARRIED OUT USING HIGH FREQUENCIES ULTRASONOGRAPH AND **THUZZLE** DEVICE, WHICH IS USING **INNOVATIVE MULTIWAVE TECHNOLOGY.**

**High frequency ultrasound** is revolutionary resolution for skin imaging diagnostics. This solution is the only non-invasive in the world, a method that allows you to obtain an image in the form of cross section of epidermis and dermis with resolution up to 21  $\mu\text{m}$ .

The quality of scans obtained, thanks to such high-quality resolution is perfectly correlated with histological images in vivo in real state. Thanks matching frequency, the depth of penetration of the sound wave allows for controlling all layers of skin on a micro anatomic level.



## It allows:

Assessment of skin condition and age, effectiveness test performed treatments, monitoring and evaluation of the applied cosmetics, skin changes, scars, measurements of cellulite and depth of wrinkles.

The equipment finds its application as documentation medical and facilitates the work of many medical offices, universities and pharmaceutical and cosmetic laboratories. Accompanies doctors and cosmetologists during diagnosis allowing you to choose the right treatment for your skin condition, allows monitoring of effects (specific measured values) and also provides security in the form of kept medical records.

**The equipment was used to depict the condition of the skin after treatments with the Thuzzle device.**





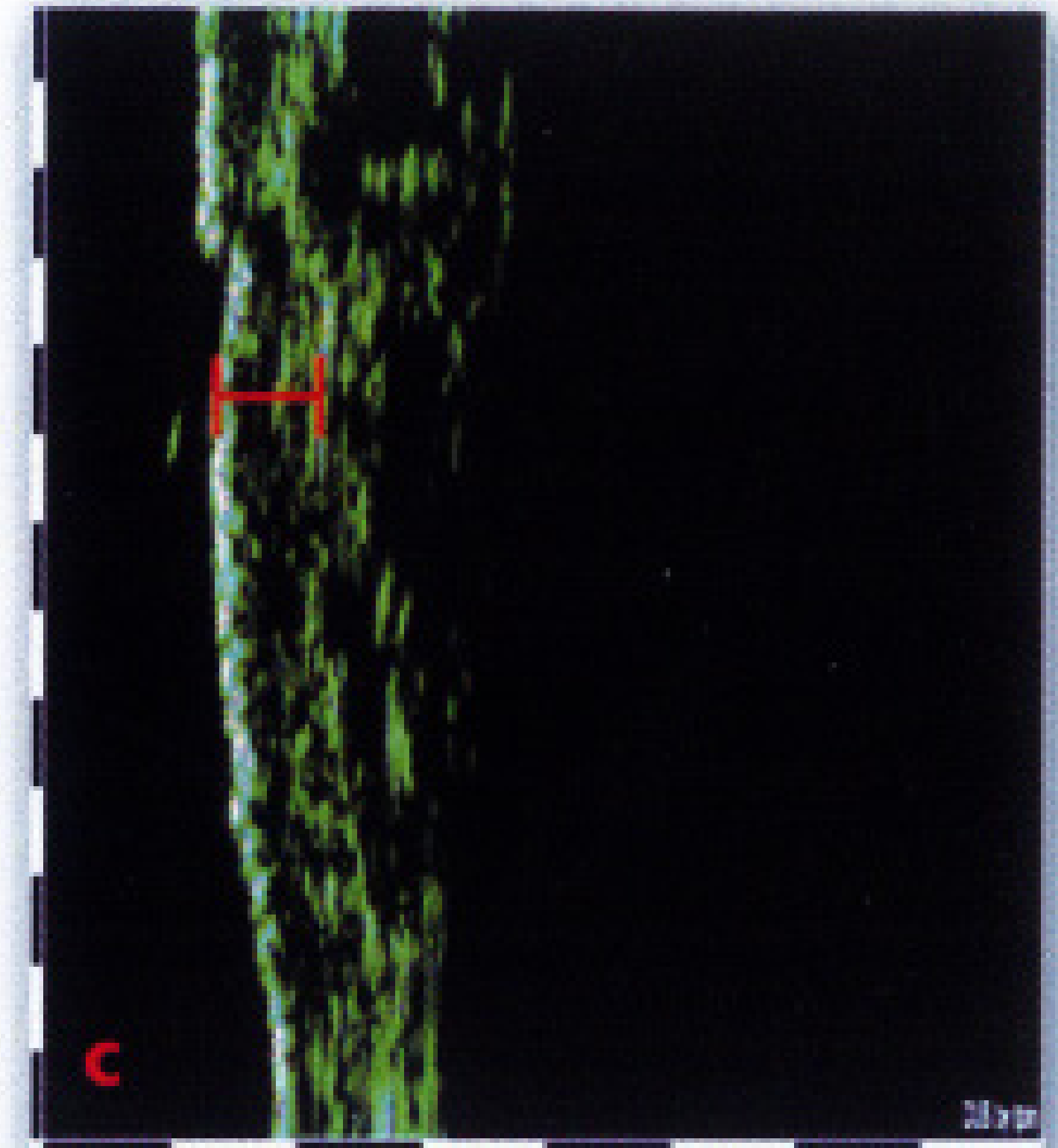
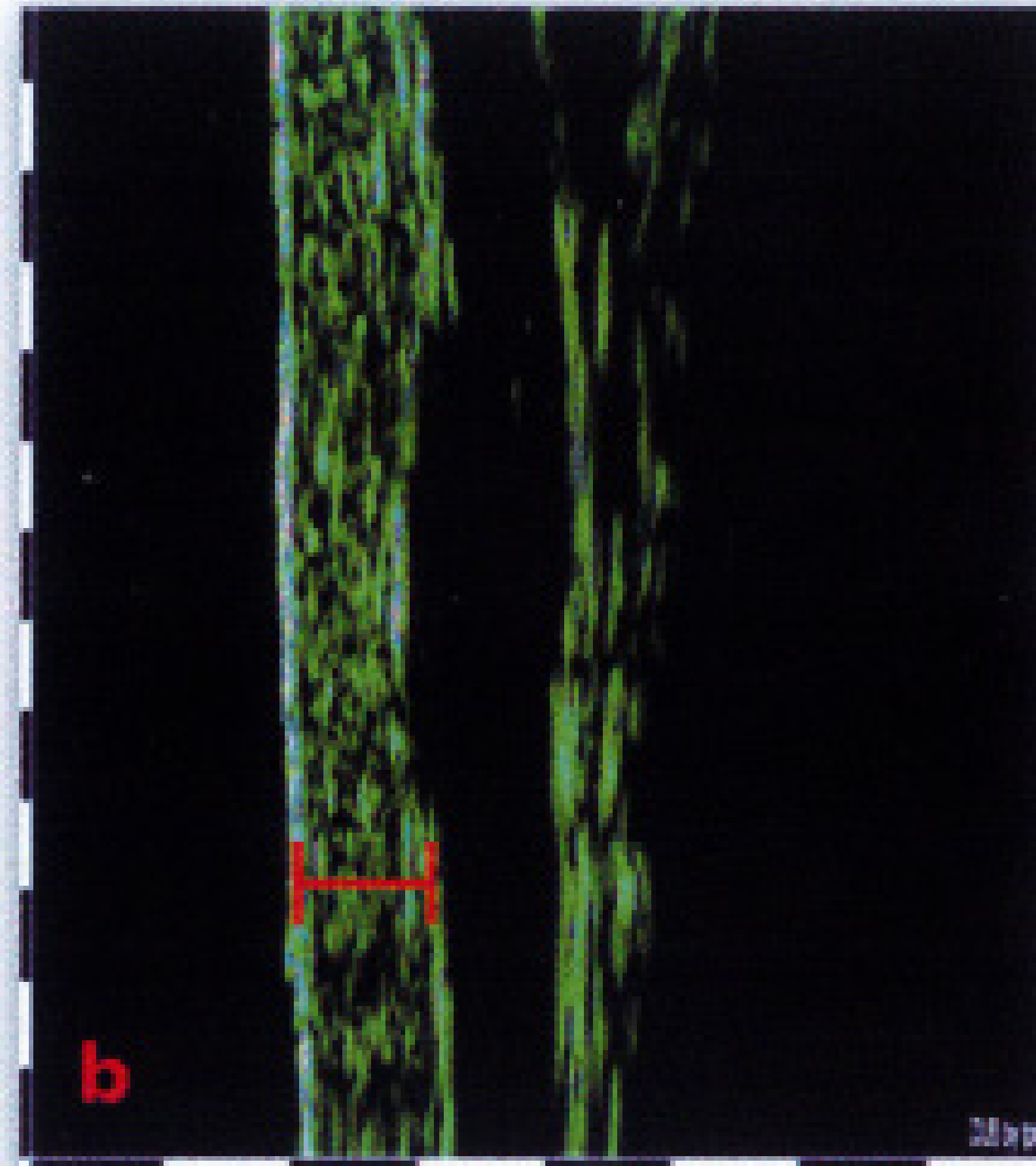
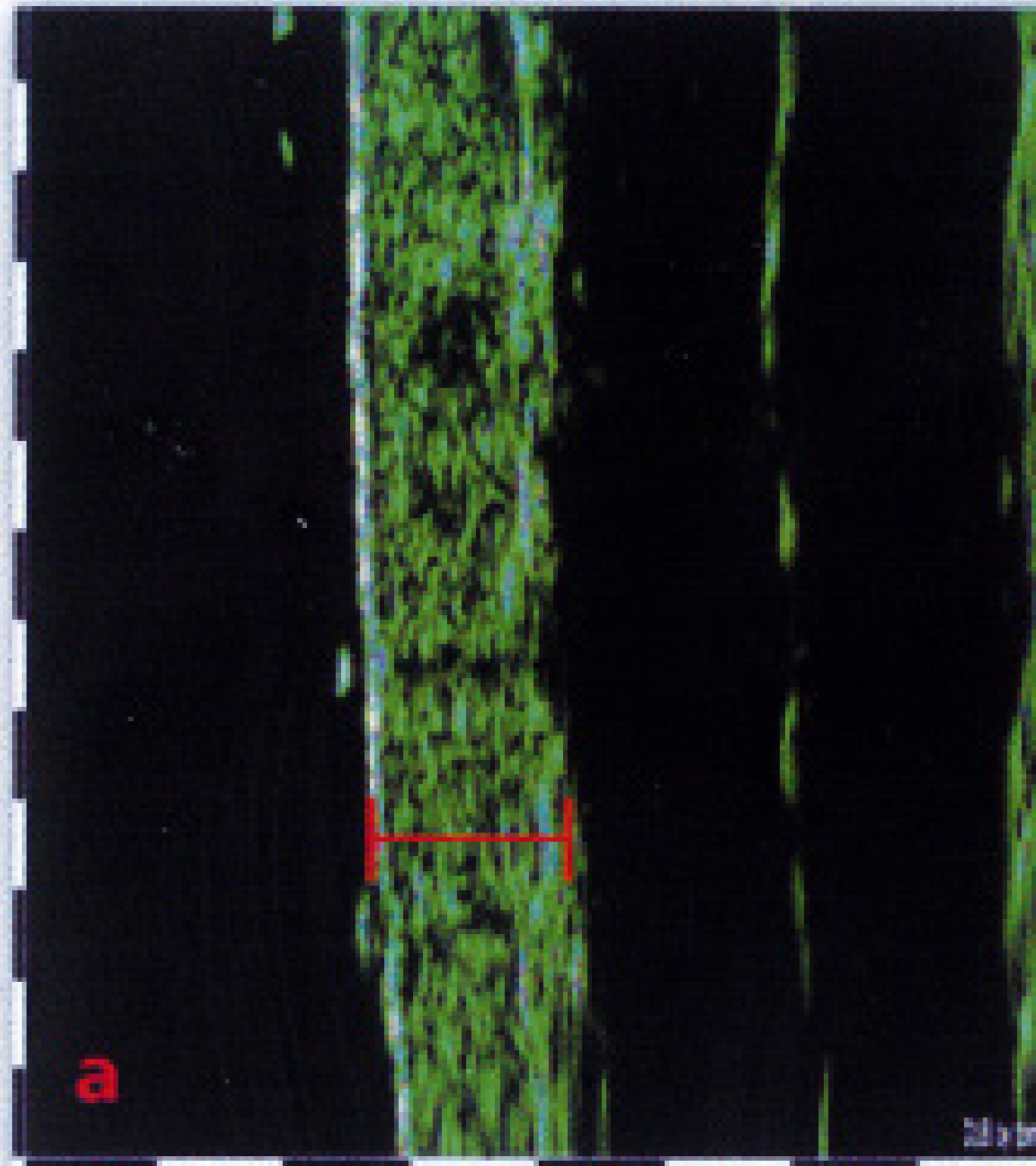
## **Thuzzle** is three innovative technologies.

It is the actual effect illustrated in the research, it is patient satisfaction and safety performed treatments.

The images below indicate that applied cross-linked wave technology is great for skin condition by increasing its density, thickness, metabolism, collagen content and elastins and thanks to that thus flexibility, tension and shallow wrinkles.

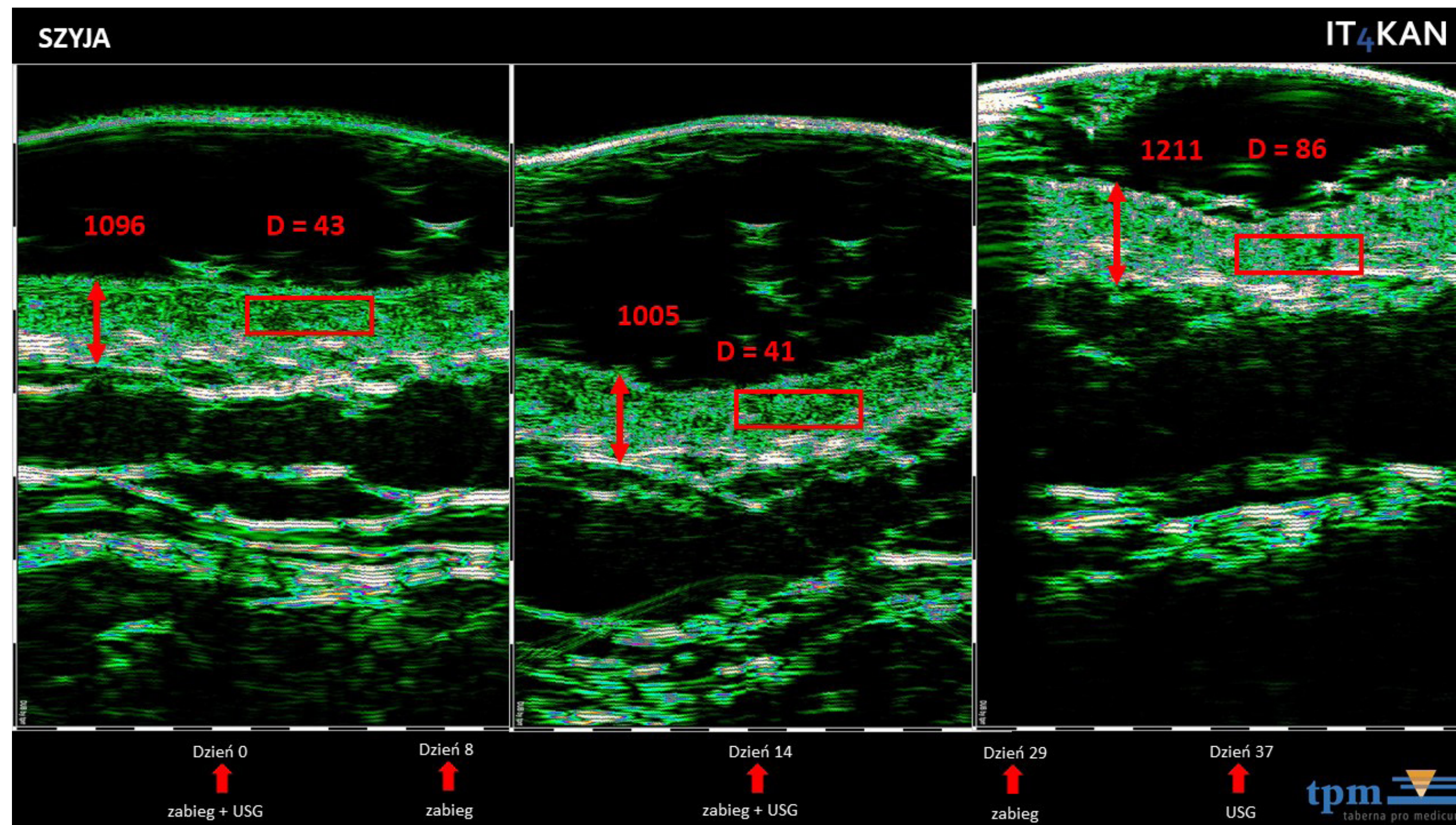
In addition, we see how the Thuzzle devices perfectly reducing cellulite by making it shallow "Cellulite teeth" while firming skin.

## ■ Skin aging - 22 MHz



Slide above shows skin density and thickness of persons age 28, 45 and 80 years old. Visible loss of density including collagen and elastin fibers and also skin thickness with increasing age.

## Slide 1.- Neck, Female 39 years old



Four treatments were performed with Thuzzle.

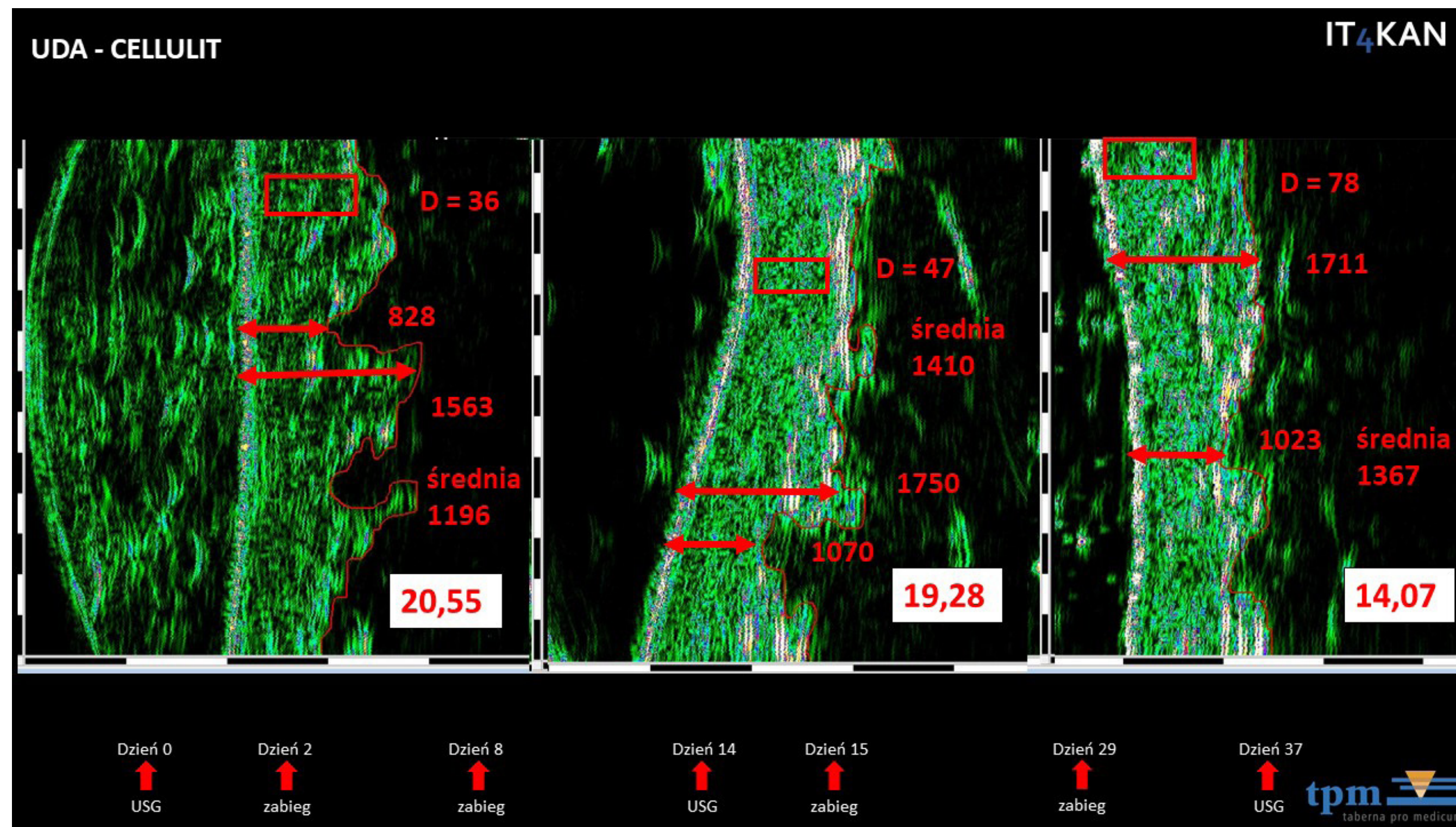
The image presents a set of three images from **high frequency ultrasound examinations**. The examinations were performed in the same location - the neck. The test was performed three times.

In the first image taken before the start of the series of treatments, the thickness of the skin was 1096 micrometres, i.e. slightly more than mm - **1.096** mm, and its density was **43 - units** of acoustic density, a characteristic size for an ultrasound image

After 14 days the examination was repeated (in the meantime the patient underwent another surgery). On day 14, the density and thickness of the skin decreased.

In turn, an examination made **37 days after** the first treatment showed significant regeneration - the thickness of the skin increased to **1.211 mm**, and its density to **86 units**.

## Slide 2.- Cellulite, Female 39 years old



Four treatments were performed with Thuzzle

The image presents a set of **three images from examinations performed on high frequency ultrasound**. The examinations were made three times.

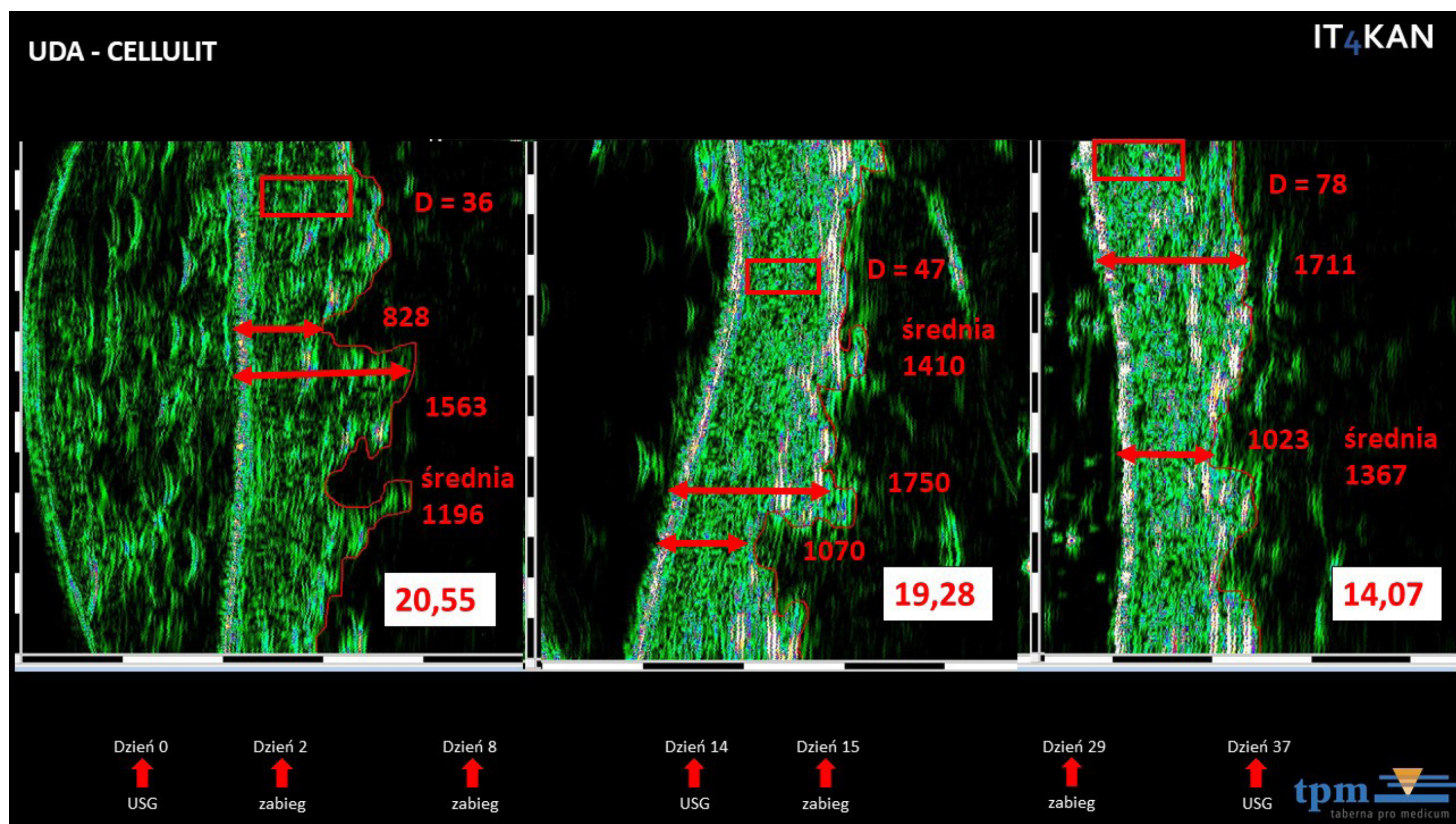
In the first image taken before the start of the series of treatments, the maximum thickness of the skin was over **1.5 mm**, the minimum thickness was **0.8 mm (average skin thickness about 1.2 mm)**.

The appearance of significant differences in skin thickness in the examined location is characteristic for the occurrence of cellulite. The skin density on the thigh was **36 - units** of acoustic density, the size characteristic for the ultrasound image

In addition, the image is marked with a red line between the skin and the subcutaneous tissue with fat - special attention should be paid to the occurrence of „cellulite teeth” - bands of subcutaneous tissue with fat penetrating deep into the dermis.

## Slide 2.- Cellulite, Female 39 years old

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Four treatments were performed with Thuzzle

In order to compare the effects of the treatments - i.e. cellulite reduction - specifically these cellulite teeth - this line was measured and was **20.55 mm**.

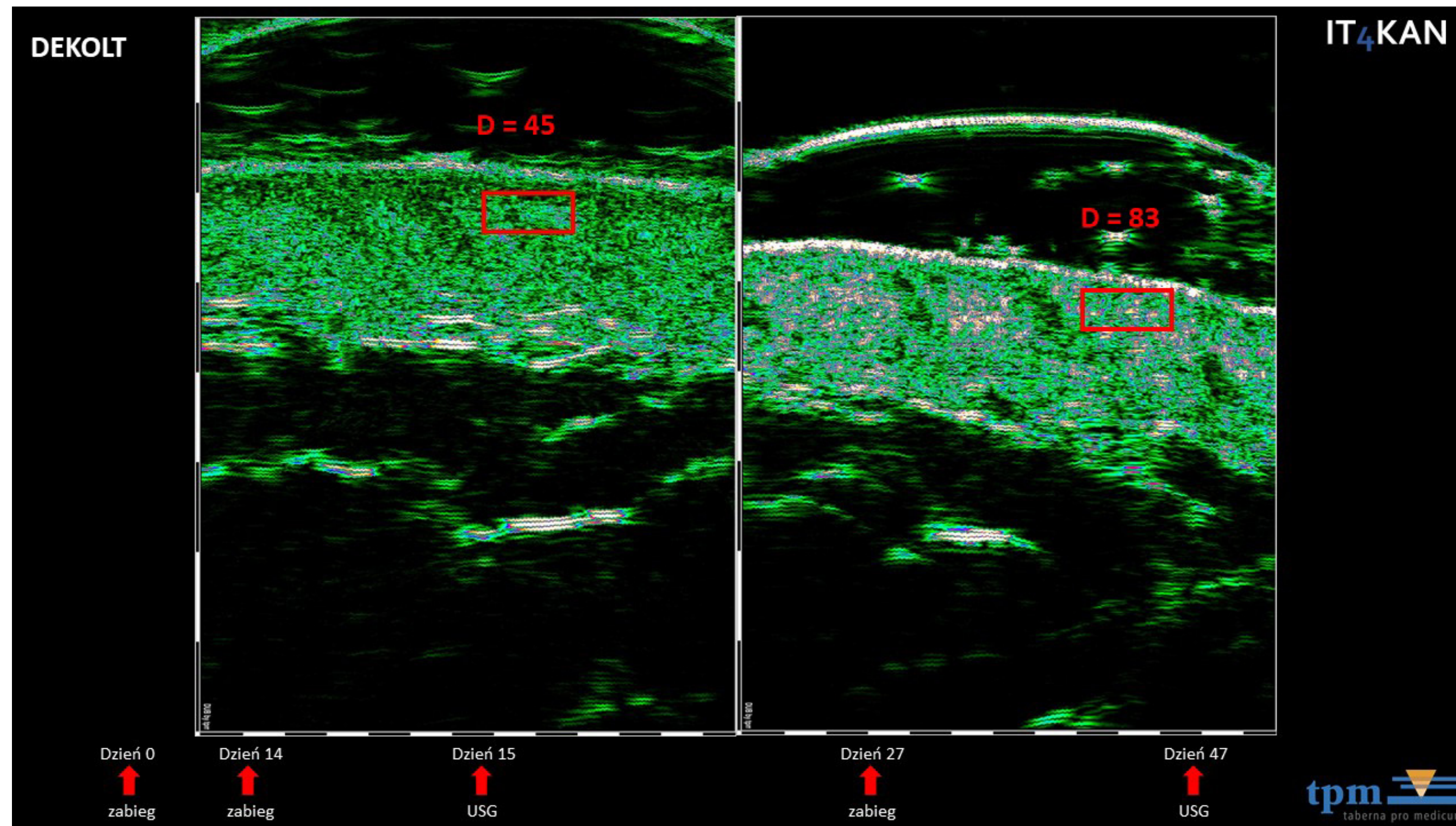
In the following days these values changed. **After 14 days**, the density was **47 units**, minimum thickness **1.07 mm** and maximum thickness **1.75 mm** (average thickness **1.41 mm**). The length of the subcutaneous tissue border with fat is **19.28 mm**.

On the **37th day of therapy**, the results were as follows: density - **78**, maximum thickness - **1.711 mm**, minimum thickness - **1.023 mm**, tissue border length - **14.07**. Particularly noteworthy is the image of shallow „cellulite teeth”.

Thanks to the measurements made, we know that the length of the border between the subcutaneous tissue with fats and the dermis has decreased by **6.48 mm**, which is **over 30%**.



## Slide 3.- Neckline, Female 49 years old



The image presents a combination of two images from high frequency ultrasound examinations.

The tests were made in the same location. The examination was performed twice, **15 days** and **47 days** after the first surgery

The procedures were performed 3 at 14-day intervals. We see a clear increase in skin density and numerous collagen and elastin fibers

The density after 14 days = **45**, and after 47 days is **83**.

Three treatments were performed with Thuzzle

Slide 3.- Neckline, Female 49 years old