# Using the power of **Pulsed Wave Therapy**

to accelerate your body's natural healing ability...



### The History of Pulsed Wave Therapy

Pulsed Wave Therapy commonly referred to as "Shockwave" Therapy is a relatively new form of treatment in the fields of orthopedic and rehabilitation medicine.

The effect of true "shockwaves" was first documented during World War II when the lungs of castaways on merchant ships were noted to be damaged without any superficial evidence of trauma. It was discovered that the shockwaves created by deep sea depth-charges were responsible for the internal injuries. This created a great deal of interest and research into the biological effects of shockwaves on living tissue.

The first medical treatment developed from this research was lithotripsy. This allowed "Focused" shockwaves to specifically target and essentially dissolve kidney stones without surgical intervention. Today, over 98% of all kidney stones are treated with this technology.

The use of a modified "Radial" version of shockwaves to treat tendon related pain began in the early 1990s.

### How is Radial Pulsed Wave therapy different than Focused Shockwave?

Focused shockwaves have an intentional, controlled destructive effect on a specific site or point of impact, radial pulsed waves do not. A therapeutic, radial pulsed wave (radial shockwave) is nothing more than a controlled sonic pulse, much like an airplane breaking the sound barrier.



The primary effect of a pulsed wave is a direct mechanical force as the wave's energy passes through tissue. These waves are believed to cause a controlled impact on the tissue being treated. This results in a biological reaction within the cells of that tissue (inflammation), which triggers the body to accelerate its natural healing response, and increase blood flow to the injured site.

Radial Pulsed Wave Therapy has proven to be one of the most effective treatments for heel spurs and other similar conditions

### What can be treated with Radial Pulsed Waves?

Pulsed Waves are used to treat many orthopedic conditions, including:

- Plantar fasciitis (heel spurs)
- Patellar tendinitis (jumper's knee)
- Lateral epicondylitis (tennis elbow)
- Medial epicondylitis (golfer's elbow)
- Thumb basal joint Arthritis
- Shoulder tendinitis



### • Chronic Inflammation

- Bursitis
- Shin splints
- Morton' s Neuroma
- Stress Fractures
- Osteoarthritis

## *Is it effective, can it help me?*

Yes, there has been a lot of clinical research done that clearly shows Radial Pulsed Wave therapy is a highly effective treatment option for many conditions. We have listed some of the world's leading research documents at the end of this booklet. The evidence overwhelmingly supports this therapy as a breakthrough technology in orthopedic medicine for the treatment of many musculoskeletal injuries.

Radial Pulsed Wave therapy works without the use of drugs and stimulates the body's natural self-healing process. There is an immediate reduction of pain and improved ease of movement. Shockwave Therapy may even eliminate your need for surgery.

Before recommending Radial Pulsed Wave (Shockwave) Therapy, our professional team will need to assess your condition to determine if this treatment will benefit you. No two people will respond exactly the same to therapy, even if they share what seems to be a similar condition.

### Is It Safe?

Yes. All studies done to date show that when Pulsed Wave Therapy is used for the appropriate conditions there are no negative health effects. However, there are certain conditions where Pulsed Wave Therapy is not recommended. These include coagulation disorders, therapy over cancerous regions or tumors, children in a growth stage and pregnancy. For this reason we take special care to assess your individual condition and medical history.

### How long does it take?

Typical treatments last 5 minutes per area that we are treating. In that time we typically deliver about 2000 pulses. Most conditions require multiple treatments spaced several days apart to allow your body to do its natural healing in between sessions.

During your initial assessment our team will evaluate your specific condition to determine how many treatments you will need.

#### Pulsed Wave Therapy offers new hope for patients



with conditions that are difficult to treat with other forms of therapy.

### Treatments take as little as 5 minutes with immediate results



### Immediate Results

Unlike many other forms of therapy, with Pulsed Wave Therapy you will usually notice immediate results. These often include:

- A significant reduction in pain
- An increase in your range of motion, improved mobility
- Your muscle tone is normalized
- Previously noticeable "knots" or tightness have become relaxed



### How does it work?

A small metal ball (projectile) is accelerated inside the handpiece using electro-magnetic propulsion until it impacts the stop plate. This collision generates a mechanical pressure wave. The wave of energy is transferred to the applicator head which then sends that energy through the body.

Different sized 'heads' are used on the handpiece applicator depending on the type of treatment being delivered.

The process is often loud, but rest assured that this is normal. The sound you hear is nothing more than the sound generated when the projectile impacts the stop plate in the handpiece.



Applicator heads are different sizes for different types of treatments (shown here without blue silicon covers).

enPuls 2.0 Radial Shockwave unit from

Zimmer







You will likely notice an immediate reduction in pain as soon as the therapy is completed.

### Does it Hurt?

If your treatment is on a "fleshy" area, you are not likely to feel any discomfort at all. Treatments on "boney" regions tend to be more sensitive. Your first treatment may be uncomfortable at first but most patients find it tolerable. As your body heals, you will find each successive treatment easier.

If you are especially sensitive, adjustments on the Pulsed Wave machine can decrease the discomfort you feel.

We use a device called the Zimmer enPuls specifically because it delivers a patented "Soft Shot" pulse which is much less likely to cause discomfort during treatment.



The patented "Soft Shot" technology makes treatments gentler but just as effective



Do not use ice or anti-inflammatory medications after treatment, this will reduce your body's natural healing response

### After Treatment Care

• There may be no immediate pain, but some patients experience a little discomfort, reddening or bruising 2 - 4 hours after the treatment. In some cases it can last up to 48 hours and in very rare cases, it may last up to 5 days.

• The treatment will trigger an inflammatory response, which is the body's natural process of healing. For this reason, do not use anti-inflammatory medications or ice.

• Even if you feel good, we recommend decreased activity for 48 hours following your treatments.

### An Internationally Proven Therapy

#### **Research References**

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# Waves for Healing

Ask today if this therapy is right for you.

For more information contact: