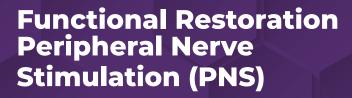
### Accurately diagnosing and treating pain with personalized care

Our network of pain management physicians treats a variety of conditions, using comprehensive diagnostic techniques and non-surgical treatments for all musculoskeletal pain.

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Treatment for Lower Back Pain

Spine & Pain



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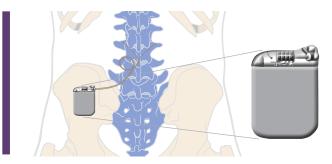
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If you have low back pain, you may also have a weak multifidus muscle.

The multifidus is a deep muscle that runs along the length of the spine. It contains many smaller muscles that connect the backbones and plays an important role in strengthening the spine.

There is a multifidus muscle on the left side of your spine and another on the right side. Together, these two muscles are known as the multifidi.



# Functional Restoration Peripheral Nerve Stimulation (PNS)



Treatment for Lower Back Pain

### Why Do Multifidi Muscles Become Weak?

The multifidi muscles can weaken after a back injury or when the spinal discs break down (degenerative disc disease). Weakness of the multifidi makes the spine unstable and puts you in a cycle of back pain where new back issues can appear.

Weak multifidi muscles are also linked to the following back issues:

- Muscle atrophy (muscle wasting)
- Vertebrogenic low back pain (pain from the backbones)
- Low back pain with sciatica (low back pain that shoots down the leg)

Fortunately, there is a treatment that helps with these issues!

### What Is Functional Restoration PNS?

Functional Restoration Peripheral Nerve Stimulation (or Functional Restoration PNS) is a treatment where **a medical device sends electric pulses to the multifidi muscles**. Your pain specialist places this device in your low back, where many pain issues start.

The electric pulses cause the multifidi muscles to grow stronger without you having to consciously exercise them. As the muscles get stronger, you may feel relief from your low back pain.

#### When Is Functional Restoration PNS Used?

It is used in people with multifidus weakness where back pain has not improved with pain medications and physical therapy.

### How Long Does a Functional Restoration PNS Device Implant Take?

The device can be placed (implanted) in your back during an outpatient procedure that takes under 1 hour. After a short recovery in the clinic, you go home. Avoid heavy lifting for the next 4 weeks.

#### **How Often Is This Procedure Done?**

This is a one-time procedure. You can keep the device as long as it provides good pain relief.

## What Are the Expected Results? Pain relief can start in the first couple of days after the device is implanted.

According to a clinical study where 102 people received Functional Restoration PNS using the ReActiv8 System:

- Most patients had decreased back pain after four months of treatment.
- Treated patients could sleep, walk, and generally function better.
- Improvements continued throughout the first year of treatment.

### **Is There a Longer Lasting Treatment?**

No. Surgery is often considered the final treatment for patients with chronic back pain. However, some patients are not good candidates for surgery and benefit from strengthening the multifidi muscles with Functional Restoration PNS.

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