

### **ABOUT DISC HERNIATION**

#### WHAT IS DISC HERNIATION?

Each vertebra in the spine is separated by a disc. These discs are composed of a tough fibrous outer ring (annulus fibrosus) and a gel-like center (nucleus pulposus). Functioning much like a shock absorber, they spread out the weight-bearing forces in the spine. If the outer ring gets damaged, one of two things can happen:

- » The ring stretches, much like a balloon, and pushes out into a space where it's not supposed to be ("disc bulge").
- » The outer ring tears, allowing the center to leak out (a "herniated disc").

In either case, nerves that travel through the spine can become irritated/inflamed or compressed by the disc.

#### **HOW DOES A HERNIATED DISC HAPPEN?**

As we age, our discs weaken. When this occurs, repetitive stress or injury may cause damage to one or more discs. The gel center may then bulge out of the damaged fibrous ring and put pressure upon the spinal cord, nerves, or other sensitive tissues. When this happens, you may experience pain or symptoms such as weakness, numbness, or tingling.

#### WHAT ARE THE SYMPTOMS OF A HERNIATED DISC?

Early symptoms (when a disc is bulging, but before it herniates) can be somewhat vague. Many people report a generalized backache. When a disc herniates, the pain can be sudden and severe. You may experience severe shooting pains, weakness, or numbness down an arm or leg. Rarely, bowel and bladder problems can also occur.

### NONSURGICAL TREATMENT OPTIONS

Fortunately, despite the pain associated with a disc herniation, symptoms can often improve on their own with supportive treatments. In order to compare and determine the best treatment for you, here is a summary of the possible next steps once disc herniation has been diagnosed:

#### NO TREATMENT/OBSERVATION

Depending on how severe and what caused the condition, some patients begin to get better on their own. If symptoms do not begin to subside within 6 weeks, or if they consistently keep you from performing activities of daily living, additional treatment options should be discussed. This is to make sure the right treatment happens at the right time to get the best results.

#### **ACTIVITY CHANGES**

Patients with a herniated disc may experience relief with some lifestyle changes. If specific activities make your symptoms worse, then avoiding those activities can provide relief. Patients who don't smoke, drink moderately if at all, and maintain healthy weight with regular exercise are more likely to experience the best results. These behaviors can also increase the effectiveness of other treatments such as medication.

#### ADVANTAGES

- + no surgical risks
- + low to no cost
- + minimal time investment in recovery

#### **X** DISADVANTAGES

 may require modifying away from quality-of-lifeenhancing activities

#### **MEDICATION**

Some medications can be used to help reduce pain and swelling such as anti-inflammatory medications, oral steroids, or neuroleptic medications. Note that Summit Orthopedics does not offer long-term narcotic medication pain management.

#### ADVANTAGES

- + can be a lower-cost
- + less-invasive treatment option

#### **X** DISADVANTAGES

 some medications and supplements can cause a harmful reaction with pain medications and therefore may not be an option for all patients

#### **INJECTIONS**

Injections can help relieve pain and improve function by relieving inflammation, irritation, and swelling. It may help you be able to participate in a physical therapy program designed to strengthen muscles and improve range of motion.

#### ADVANTAGES

- + cost-effective
- + nonsurgical option
- + shorter recovery time
- + enables activity to address causes of pain

## ★ DISADVANTAGES AND SIDE EFFECTS

- possibility of allergic reaction or side effects such as headache
- temporary pain at injection site

#### PHYSICAL THERAPY

Physical therapy aims to strengthen muscles and improve range of motion, with the desired result of reducing pain and improving function. Physical modalities such as deep heating treatment and electrical stimulation may help relieve pain from muscle spasms. While it may not be an available option for everyone depending on the severity of the condition, if effective, therapy can have long-term benefits in addition to avoiding surgery.

#### ADVANTAGES

- + increases in range of motion, strength, and mobility
- + can address the root cause of pain
- + nonsurgical option

## **★ DISADVANTAGES AND** SIDE EFFECTS

- time commitment
- doesn't address pain the short-term

## SURGICAL TREATMENT OPTIONS

Surgery is considered when pain is significant and not improving with nonsurgical treatment for at least 6 weeks. Other "red flag" symptoms or exam findings may require surgery sooner or even urgently. Examples of these are:

- » Significant weakness
- » Consistently worsening/progressive weakness
- » "Saddle anesthesia" (numbness in buttock, groin, perineum)
- » Bladder problems, urinary retention, or incontinence
- » Severe pain preventing daily activities

The ideal time to have surgery is when symptoms have persisted for at least 6 weeks, but less than 6 months. The results of surgery are not as reliable in patients who have been experiencing symptoms for more than 6 months so this should be a factor when considering surgical options.

#### ADVANTAGES

- + improved pain, mobility, and function
- + return to quality of life improving activities
- + better enables healthpromoting activity

## **★** DISADVANTAGES AND SIDE EFFECTS

- high cost
- recovery time for patient and caregivers
- standard surgical and anesthesia risks

#### **MICRODISCECTOMY**

The most common surgery for herniated discs is called a "microdiscectomy." In this surgery, a small incision is made in your spine on the side of the herniation. A small hole is created in the back of the spine and then the nerves are gently moved out of the way. The fragment of disc is identified and removed. Many patients are able to go home same day.

## MICRODISCECTOMY SURGERY PATIENT RESULTS

# EXPECTED OUTCOMES OF SPINE SURGICAL TREATMENT\*

A large national study found that patients who had symptoms lasting for more than 6 weeks experienced a greater improvement in pain and function as compared to patients who had nonsurgical treatment only. These improvements have been proved to be maintained in surgical patients for up to 8 years after the procedure.

#### **RISKS OF SURGERY FOR HERNIATED DISC\***

3% of patients on average experience an infection following surgery

1% of patients experience nerve injury causing numbness, weakness, or pain in Summit surgery centers

**3%** of patients have a dural tear (tear in the covering of the spinal cord)

5% of patients will reherniate the same disc within the first year

Risks listed above are common. There are many more risks associated with surgery; speak with your surgeon.

### MAKING A TREATMENT DECISION—DETERMINING YOUR VALUES

Your personal values are just as important as the medical facts. Think about what matters most to you in this decision, and place an "x" in the box for each row below that indicates which goal is more important to you.

REASONS TO HAVE SPINE SURGERY	« MORE IMPORTA	NT EQUAL	MORE IMPORTANT »		<b>≭</b> REASONS NOT TO HAVE SPINE SURGERY
I understand that surgery has risks. But I am comfortable with the idea of having back surgery, because there is a chance that it might help.					I don't like the idea of surgery at all, because of the risks and the chance that it might not help.
I've tried exercises, medicines, and working with a physical therapist, and I don't think they have helped me.					I think the exercises I've been doing or the medicines I'm taking are starting to help.
I'm in a lot of pain and I don't see how I can stand it much longer.					My pain isn't bad enough that I need to have surgery right now.
It is very important that I get my pain under control so that I can go back to work as soon as possible.					Time is not a problem for me. If I get better slowly using exercises and/or medicine, that's OK with me.
I'm not worried about how much this surgery will cost.					I don't have insurance and I don't see how I can afford this surgery.
Other:					Other:

#### ··· GETTING TO A DECISION

After reading and completing the above, which way are you leaning regarding your treatment options for your condition?

A. Leaning toward having spine surgery

B. Leaning toward not having spine surgery

C. Undecided

Do you feel you know enough about your condition and the treatment options available, including resources to make the best decision for you?

A. Yes

B. No

Do you feel you have enough support, advice, and resources to make the best decision for you?

A. Yes

B. No

#### .... NEXT STEPS

Use your responses above to help guide the discussion during your next appointment with your provider.

<sup>\*</sup>To view the complete list of sources cited for patient surgical result statistics, please visit https://www.summitortho.com/back-surgery-patient-results/