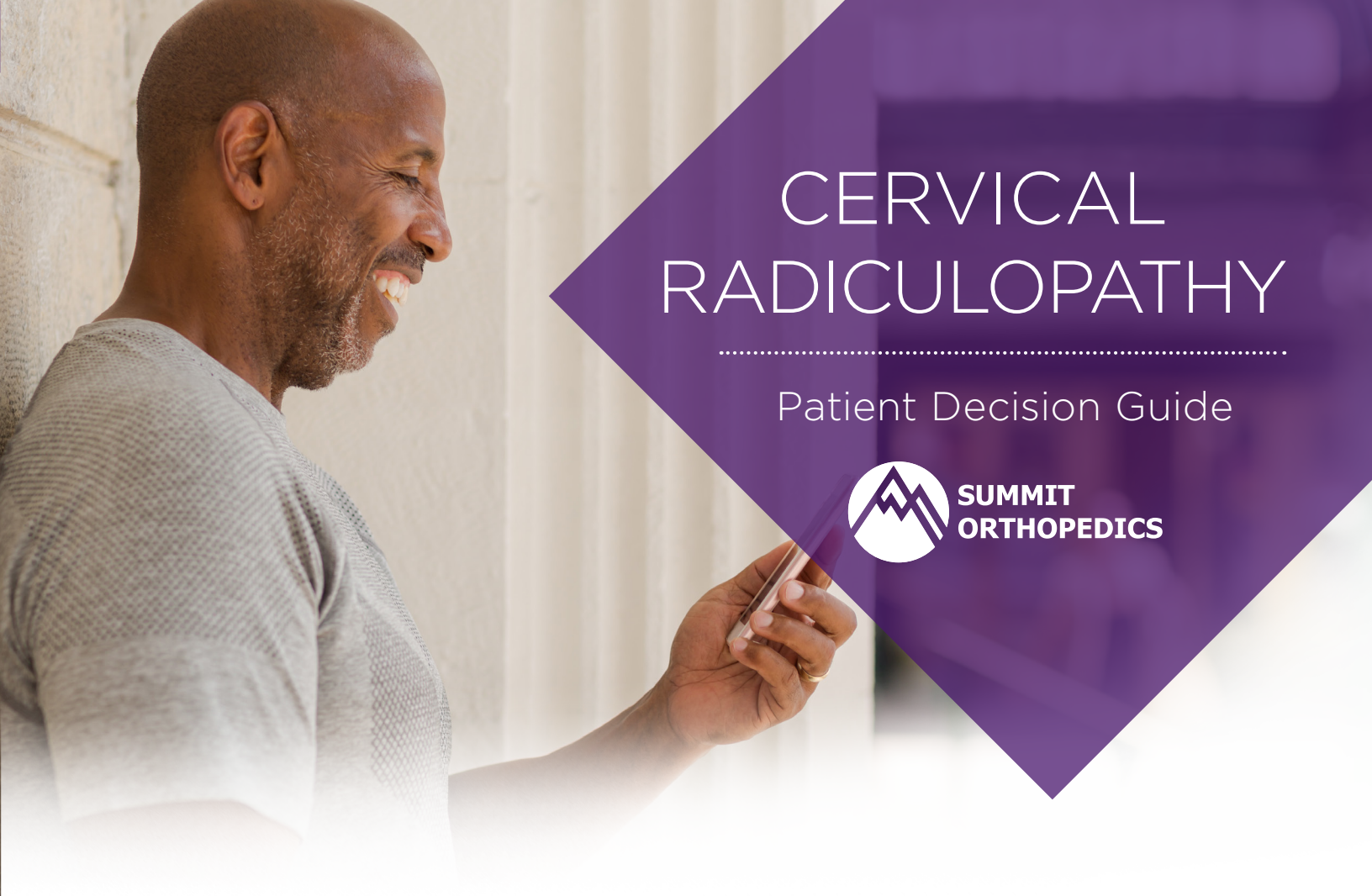

CERVICAL RADICULOPATHY

Patient Decision Guide

SUMMIT ORTHOPEDICS

ABOUT CERVICAL RADICULOPATHY

Our nerves are the information highway that carries signals from the body to the brain and spinal cord. When a spinal nerve is compressed (pinched) in the neck, it causes a medical condition called cervical radiculopathy.

WHAT CAUSES CERVICAL RADICULOPATHY?

A nerve becomes pinched when surrounding bones, disc cartilage, muscles, or tendons put too much pressure on it.

Examples of this are:

» Nearby bone spur from osteoarthritis or degenerative disc disease as part of the aging process or injury

» Cervical herniated disc

» Inflammation

WHAT ARE THE SYMPTOMS?

Signs of cervical radiculopathy include:

» Arm pain commonly on just one side, but can also be on both sides

» Uncomfortable tingling sensations in arms similar to when your foot falls asleep, except it's persistent

» Arm pain often described as “sharp” or “electrical” feeling

» Arm muscle weakness or changes in reflexes

» Pain can move (or radiate) down the arm

» Numbness

HOW IS IT DIAGNOSED?

In most cases, a diagnosis is made from a careful review of your medical history and a physical exam. Advanced imaging studies such as MRI and CT scan can be helpful to pinpoint the exact underlying cause and can be helpful in determining next treatment options.

NONSURGICAL TREATMENT OPTIONS

Fortunately, despite the pain associated with a pinched nerve, 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 radiculopathy 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 mentioned below.

ADVANTAGES	DISADVANTAGES
+ no surgical risks + low to no cost + minimal time investment in recovery	– may require modifying away from quality-of-life-enhancing activities

MEDICATION

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

ADVANTAGES	DISADVANTAGES
+ can be a lower-cost + less-invasive treatment option	– 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	DISADVANTAGES AND SIDE EFFECTS
+ cost-effective + nonsurgical option + shorter recovery time + can address the root cause of pain	– possibility of allergic reaction or side effects such as headache – temporary pain at the 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.

ADVANTAGES	DISADVANTAGES AND SIDE EFFECTS
+ increases in range of motion, strength, and mobility + nonsurgical option	– time commitment – doesn't address pain the short-term

Summit Orthopedics is the first surgery center in the nation to receive the prestigious

CERTIFICATE OF DISTINCTION IN THE MANAGEMENT OF SPINAL FUSION

by The Joint Commission for superior patient outcomes and quality of care.

SURGICAL TREATMENT OPTIONS

Surgery is considered when your pain is significant and doesn't improve with nonsurgical treatment after at least 6 weeks. Other "red flag" symptoms or exam findings may require surgery sooner. Examples include:

» Significant weakness

» Worsening/progressive weakness in arms or legs

» "Saddle anesthesia" (numbness in buttock, groin, perineum)

» Bladder problems, incontinence, or urinary retention

» Severe pain preventing daily activities

» Spinal cord dysfunction

» Coordination and balance trouble

TOTAL DISC ARTHROPLASTY

The cervical spine is accessed from the front, and the esophagus and trachea are moved gently to the side. The entire disc is removed, and any bone spurs or herniated disc material are removed from the spinal canal. A metal ball and socket joint is then secured into the space between the bones where the disc used to be. This allows the disc to move normally after surgery.

ANTERIOR CERVICAL DECOMPRESSION AND FUSION (ACDF)

The cervical spine is accessed from the front, and the esophagus and trachea are moved gently to the side. The entire disc is removed, and any bone spurs or herniated disc material are removed from the spinal canal. A contoured block of bone or a synthetic cage is then placed where the disc used to be, and a small plate is secured to the front of the spine with screws at each level. Over time, the bone graft will heal into the bone above and below, becoming one solid piece.

ANTERIOR CERVICAL CORPECTOMY AND FUSION (ACCF)

During a corpectomy, an entire vertebral body is removed to take pressure off the spinal cord. The surgical approach is similar to an ACDF. The disc above and below the operative level are removed completely and the middle portion of the bone is also resected back to the spinal cord. This allows reduced pressure of the spinal cord in areas that a typical ACDF cannot access. The space between the remaining bone ends is then stabilized with a cage filled with bone, and then a plate is secured in place.

POSTERIOR SURGERIES (INCLUDING LAMINOFORAMINOTOMY)

This is an approach from the back of the spine to remove a small area of bone, bone spurs, or tissue to "unroof" the area where the the nerve travels and is pinched.

LAMINECTOMY

In this procedure, the cervical spine is accessed from the back of the neck. Bone in the back of the spine (lamina) is removed to "unroof" the spinal canal and remove pressure from the spinal cord and nerve. This results in a wide decompression. The cutout portion of bone and ligament may lead to bony instability in some cases, particularly when performed at multiple levels.

LAMINOPLASTY

Laminoplasty uses a similar surgical approach to laminectomy. Instead of removing all of the bone in the back of the spine, a laminoplasty is performed by creating a cut on one side of the bone to create a hinge. The other side is cut, and the bone is lifted and secured with a small plate to hold the spinal canal open. Laminoplasty is typically performed at multiple levels at the same time to open the central spinal canal.

POSTERIOR CERVICAL FUSION (PCF)

The spine is approached from the back, and the muscles are moved off the back of the spine. Screws are then placed into the bones at the operative levels and are connected together by rods. The bone edges are then "scuffed" to create some bleeding, which allows bone healing. The bone graft material is then placed over the surgical levels. A posterior cervical fusion can be used to provide additional stability and improve healing in combination with other surgical procedures, including a multilevel ACDF, multilevel corpectomy, or multilevel laminectomy. Sometimes a posterior cervical fusion can be used to provide additional stabilization and fusion from the back of the spine when an anterior approach has failed to heal (pseudoarthrosis).

ADVANTAGES

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

DISADVANTAGES AND SIDE EFFECTS

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

NECK SURGERY PATIENT RESULTS

EXPECTED OUTCOMES OF SPINE SURGICAL TREATMENT AT SUMMIT SURGERY CENTER*

86–95% reduction in arm pain

35% average improvement Neck Disability Index Score

88% maintenance or improvement in neurologic status

RISKS OF SURGERY FOR CERVICAL RADICULOPATHY*

0.1% infection rate

2.4% experience a hematoma, requiring surgery

9.5% of patients experienced dysphagia (difficulty swallowing)

25.9% of patients who underwent an ACDF developed symptomatic adjacent segment disease at 10 years

Percentage of patients who develop pseudoarthrosis by level:

0–4%—1 Level

24%—2 Levels

48%—3 Levels

56%—4 Levels

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 IMPORTANT		EQUAL	MORE IMPORTANT »		✖ REASONS NOT TO HAVE SPINE SURGERY
I understand that surgery has risks. But I am comfortable with the idea of having neck 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?	Do you feel you know enough about your condition and the treatment options available, including surgery, to make a decision?	Do you feel you have enough support, advice, and resources to make the best decision for you?
A. Leaning toward having spine surgery B. Leaning toward ***not*** having spine surgery C. Undecided	A. Yes B. No	A. Yes B. No

NEXT STEPS

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

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

Thank you for entrusting us with your care.