Christiana Care urgent referral providers for acute lumbar radiculopathy

Urgent lumbar disc herniation and radiculopathy pathway patients (those with severe pain, progressive neurologic deficit or other red flags). will be seen within one week of referral. The patient or provider requesting the appointment should identify the patient as an acute radiculopathy pathway patient (or "pathway patient")

Please contact Lori Czajkowski if you have any difficulty with getting an appointment.
302-733-5967 / loczajkowski@christianacare.org

Group	Contact Number for urgent referral	Providers
AdvanceXing Pain and Rehabilitation www.advancexing.com	**302-384-7439**	**Selina Xing, MD (PM&R-Pain)**
Center for Interventional Pain and Spine www.centerpain.com	**302-477-1706**	**Philip Kim, MD; Chee Woo, MD (Anesthesiology-Pain)**
Christiana Spine Center www.christianaspinecenter. Com	**302-623-4144**	**Tony Cucuzzella, MD; Elva Delport, MD; Ann Kim, MD; Nancy Kim, MD; Yong Park, MD; Scott Roberts, MD (PM&R-Spine/Pain)**
Christiana Spine www.christianaspine.com	**302-623-4004**	**Rush Fisher, MD (Orthopaedics-Spine)**
Comprehensive Spine Center www.painrehab.net	**302-734-7246**	**Ganesh Balu, MD (PM&R-Pain)**
Delaware Back Pain and Sports www.delawarebackpain.com	**302-733-0980**	**Barry Bakst, DO; Stephen Beneck, MD; Arnold Glassman, DO; Rachel Smith, DO; Craig Sternberg, MD (PM&R-Spine/Pain)**
Delaware Neurosurgical Group www.delawareneurosurgicalgroup.com	**302-366-7671**	**Leif-Erik Bohman, MD; Paul Tymour Boulos, MD; Matthew Eppley, MD; Pawan Rastogi, MD; Pulak Ray, MD; Michael Sugarman, MD; Kennedy Yalamanchili, MD (Neurosurgery-Spine)**
Delaware Orthopaedic Specialists www.delortho.com	**302-655-9494**	**Mark Eskander, MD (Orthopaedics-Spine)**
Delmarva Pain and Spine Center www.delmarvapain.com	**302-355-0900**	**Shachi Patel, MD (Anesthesiology-Pain)**
First State Orthopaedics www.firststateortho.com	**302-731-2888**	**Bruce Rudin, MD; James Zavlasky, DO (Orthopaedics-Spine)**

Christiana Care Low Back Pain Pathway

Quality of evidence for treatment recommendations:
High (Good)
Moderate (Fair)
Low (Poor)
Insufficient

ACP Guideline for Low Back Pain (NASS Guidelines for Disc Herniation/Radiculopathy)

Is there evidence for cauda equina syndrome (acute bowel/bladder habit changes or saddle anesthesia)?
- YES → Send patient to **Emergency Department** for treatment
- NO → **Are there any red flag signs/ symptoms? (A)**
  - YES → **Urgent Imaging (B)** (If high concern for cancer, infection or traumatic fracture, send to Emergency Department)
  - NO → -Is there a progressive or significant focal neurologic deficit (progressive weakness or motor exam with focal weakness <4/5)?
    - YES → 1. Imaging (B) 2. Referral to a spine surgeon (C)
    - NO → Is there severe radicular pain (aka sciatica)?: 1. Leg pain is severe (5-10/10), AND 2. Significant limitation in ADLs?
      - YES → 1. Imaging (B) 2. Referral to a non-surgical spine specialist for an epidural steroid injection (C)
      - NO → **Conservative Care:**
        -Education
        -Activity Modification: normal activities as tolerated, no bed rest >48 hours

        Mild (0-4):
        - Self Care (Heat/Ice, Home exercises, OTC NSAIDs)
        - Consider referral for a short course of physical therapy (D)

        Moderate-Severe (5-10):
        - Self care, plus:
        - Consider referral to physical therapy (D)
        - Consider alternative treatments, especially for chronic pain (E)
        - Consider medication management (F)
        - Consider referral to a non-surgical spine specialist (PM&R, Anesthesiology, IR) (C)

        Re-evaluate after 6 weeks: Is relief adequate?
        - NO → 1. Imaging (B) 2. Consider referral to a spine specialist for injections or surgical consultation (C)
        - YES → **Discharge with home exercise program**

Imaging findings concerning for malignancy, infection or fracture?
- YES → Appropriate referral
- NO → -Is there a progressive or significant focal neurologic deficit (progressive weakness or motor exam with focal weakness <4/5)?

Grades of Severity:
Mild: Pain 0-4 AND limited effect on ADLs
Moderate: Pain 5-10 AND limited effect on ADLs
Severe: Pain 5-10 AND significant effect on ADLs

A. Red flags to rule out malignancy, infection, and fracture:
-History of Cancer
-Fevers
-IV drug abuse
-Chronic corticosteroid use
-Severe pain, unrelated to position
-Unintentional weight loss
-Immunosuppression
-Significant trauma
-Osteoporosis

B. Imaging:
-Lumbar MRI without contrast is the preferred modality (consider ordering with contrast if recent spine surgery in the area in question)
-CT if MRI contraindicated
-Plain x-ray has limited utility, but can be used to screen for compression fracture

C. Referral to spine specialist:
-**Surgical referral**: If there is progressive or significant focal neurologic deficit, or severe pain persists despite conservative care, refer to a spine surgeon (Orthopedic or Neurosurgical spine surgeon)
-**Non-surgical referral**: If the primary issue is pain, with minimal or no motor deficit, refer to a non-surgical spine specialist: Physical Medicine and Rehabilitation, Anesthesiology, or Interventional Radiology. These providers will work to identify the pain generator, refer to ancillary providers and surgeons as indicated, perform appropriate injections and/or medication management, and coordinate care with all involved providers.
-**Acute lumbar radiculopathy** – Patients with an acute radiculopathy can be seen within one week of referral by providers in the **Urgent Referral Network.** This can be found in the **Lumbar Disc Herniation and Radiculopathy Pathway.** (Please note, the one week time frame is for acute radiculopathy, not low back pain)

D. Physical Therapy: start with a limited prescription for evaluation, treatment, education and direction on an appropriate home exercise program
-Mild: 1-3x/week for up to 6 sessions.
-Moderate-Severe: 1-3x/week for up to 12 sessions
(In either case, after this initial session, if the therapist and provider agree that more visits are needed, the prescription can then be extended)

E. Alternative care options: exercise, acupuncture, mindfulness-based stress reduction, massage, spinal manipulation, psychological therapies, tai chi, yoga

F. Medication Management: utilize the lowest effective dose for the shortest possible period of time. Start with non-opiates. Evidence for oral medications is extremely limited. These are spine work-group recommendations. Medication management needs to be tailored to the patient with careful consideration of comorbidities and risks/side effects of medication use:
-NSAIDs: take risk factors into account (GI, renal, cardiovascular, and cerebrovascular history; age), consider gastro-protective agent
-Consider neuropathic agent (such as gabapentin) for radicular pain
-Consider short course of oral corticosteroids for severe pain (caution with diabetics)
-Muscle Relaxants: warn of sedation
-Weak opioids or tramadol
  --only if non-opioids are contraindicated or ineffective
  --avoid routine use
  --avoid tramadol if on SSRI/SNRI (serotonin syndrome)
  --be aware of CDC and DE controlled substance regulations