## **LUMBAR FUSION PROTOCOL**

#### A. Indications for Lumbar Fusion:

- 1. Emergency situations in which the patient's risk for neurological or functional deficit is high unless operated emergently. These situations include, but are not limited to, clinical signs of cauda equina syndrome or other significant neurologic impairment.
- 2. Trauma with an unstable vertebral fracture or unstable facet injury (burst fracture, chance fracture, facet joint dislocation, etc.) with appropriate radiographic imaging.
- 3. Revision surgery following a surgical procedure at the same level with complications causing clinical symptoms such as: EMG documented new radiculopathy and/or risking harm to the patient, such as device failure or introgenic instability.
- 4. Tumor. Primary spinal tumor, metastases to the spine or other growth(s) causing a mass effect that damages or displaces the spine.
  - 5. Infection, including abscess and/or tuberculosis.
- 6. Correction of acquired spinal deformity secondary to trauma or flatback syndrome (i.e., iatrogenic loss of lumbar lordosis) when pain or progressive deformity is evident.
  - 7. Pseudo-arthosis where the following criteria are met:
    - a. One year of time has passed since previous lumbar fusion surgery.
    - b. Radiographic fusion has not been achieved.
- c. Clinically meaningful symptoms of pain and/or neurological complications at that level.
- 8. Adjacent segment degeneration. Lumbar fusion may be appropriate when the following criteria are met:
- a. The patient has previously undergone fusion which resulted in improvement for a period of at least six months.
- b. Imaging shows clear signs of disc degeneration, instability, and/or stenosis at a level immediately adjacent to the prior fusion.
- c. The patient presents with clinically significant pain or neurological symptoms unresponsive to a minimum of three consecutive months of structured, conservative medical treatment.
  - 9. Spondylolisthesis.
    - a. Isthmic/pars fracture.
    - b. Symptomatic degenerative spondylolisthesis.
  - 10. Symptomatic spondylolysis.
- 11. Recurrent disc herniation/extrusion if patient had a disc herniation at the same level prior to the work-related injury and there is clear evidence of new radiculopathy documented by a positive EMG.
  - 12. Stenosis with instability and/or degenerative disc disease.

#### B. Contraindications for Lumbar Fusion:

- 1. Primary surgery for a new or acute disc herniation with unilateral radicular pain.
- 2. Lumbar strain/sprain or primarily myofascial or muscular ligamentous pain s/p work-related injury.

- 3. Facet joint arthritis.
- 4. Pure spinal stenosis (without any of the other diagnoses mentioned above).

# C. Surgical Procedures:

- 1. Posterior or posterolateral fusion.
- 2. Trans-pedicular/cortical fusion.
- 3. Anterior lumbar interbody fusion.
- 4. Lateral lumbar interbody fusion.
- 5. Posterior or transforaminal lumbar interbody fusion.

### PROTOCOL HISTORY:

Passed: 9/1/1992 Amended: 6/12/2007 Amended: 5/22/2018