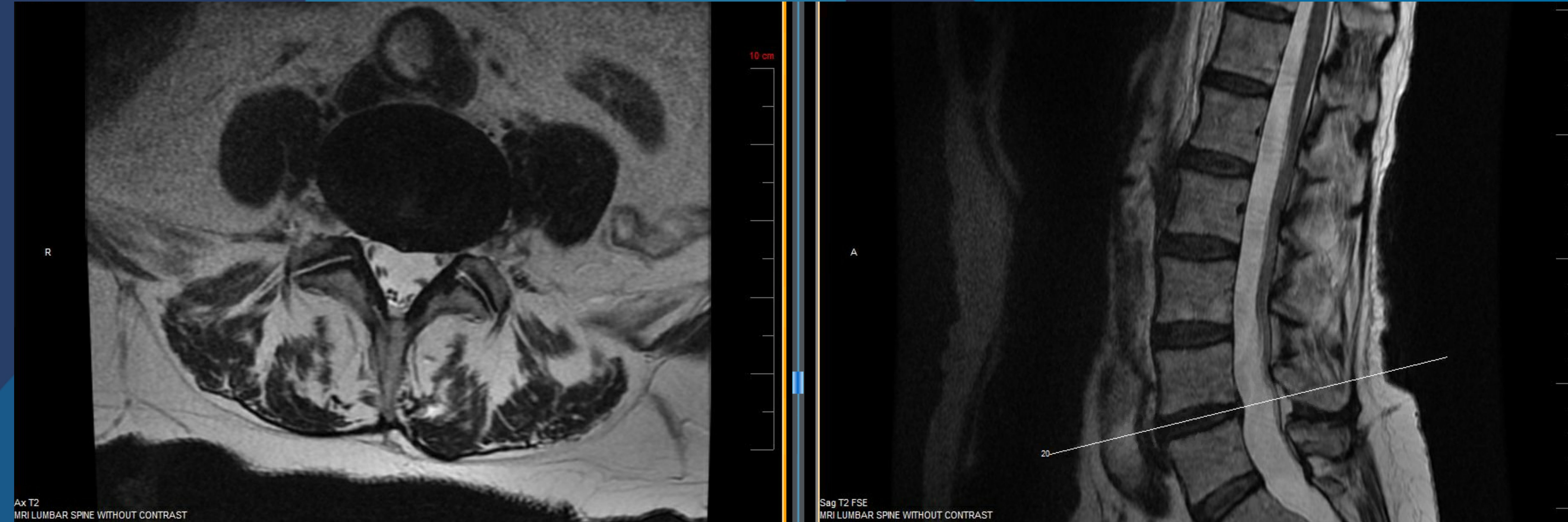


### Case Description

Patient presented to acute care hospital with worsening low back and left hip/groin pain with difficulty bearing weight on the left lower extremity. The patient had acute functional decline from post-polio syndrome, and sharp pain in left hip was severely limiting their ability to participate in therapies. MRI of lumbosacral spine and left hip revealed no abnormalities except L4-L5 disc bulge dorsolateral to the left with superimposed central disc protrusion causing encroachment of the left neural foramen and subarticular recess. Patient failed conservative pain treatments, including cortisone injection and trochanteric bursal injections, while having a low tolerance for side effects from oral pain-relieving medications. MRA of the aorta showed a stable abdominal aortic dissection, grossly unchanged. Fluoroscopically guided ESI of the left inter-laminar space at L4-L5 was performed. After injection, patient reported improvement of left groin pain and was able to functionally participate in rehabilitation therapies again.



Significant findings of L4-L5 disc bulge dorsolaterally to the left, with superimposed central disc protrusion, causing encroachment of the left neural foramen and left subarticular recess narrowing with encroachment descending left L5 nerve roots.

### Case Diagnosis

79-year-old female with medical history of childhood polio, osteoporosis, abdominal and thoracic aortic aneurysm with thoracic aneurysm repair found improvement of groin pain after epidural spinal injection (ESI) at the L4-L5 level.

### Discussion

Groin pain is classically associated with higher lumbar disc herniations at levels including L2-L3. In this case ESI was performed targeting L4-L5, and the patient eventually found improved relief which led to increased ability to participate in rehabilitation therapies, functional gains, and a successful discharge to home. One study showed that elderly patients with L4-L5 protruding herniation of the annulus fibrosus experienced groin pain. The cause of the pain was attributed to the sinuvertebral nerve that innervates the posterior annulus fibrosus, the posterior longitudinal ligament, and the dura, and was indicated as the afferent nerve of groin pain.

### References

Yukawa Y, Kato F, Kajino G, Nakamura S, Nitta H. Groin pain associated with lower lumbar disc herniation. Spine (Phila Pa 1976). 1997 Aug 1;22(15):1736-9; discussion 1740. doi: 10.1097/00007632-199708010-00010. PMID: 9259784.

### Conclusion

The patient demonstrated improvement of groin pain after an L4-L5 spinal epidural, which classically would be associated with the L2-L3 level. This case reports supports that geriatric patients who experience groin pain, should be considered for an ESI to alleviate the pain and advance these patients functionally, when all other causes have been ruled out. Physicians caring for this population should note that disc levels associated with groin pain may vary in elderly patients.