

Relieving a Painful Kiss: Early diagnosis and treatment of kissing spine syndrome.

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Introduction

Baastrup's disease or "kissing spine disease" is often referred to as a syndrome, given its constellation of symptoms and associations. This disorder was initially described in 1933 by Christian Ingerslev Baastrup⁴. It is characterized by axial back pain secondary to close approximation of spinous processes and subsequent degenerative changes. Most often L4-L5 are the areas of the spine affected. Much of the literature describes the disease as idiopathic, although it's often associated with other degenerative changes of the spine. We present a case that outlines some of features of the disease and treatment options.

Case Presentation

80 year old female with a history of chronic axial low back pain presented with worsening of low back pain one month after lumbar radiofrequency ablation. She had three previously successful multi-level lumbar radiofrequency ablations for facet mediated pain, but after the most recent ablation she reported 9/10 pain. Her walking was limited to half a block due to pain. New images obtained revealed worsening degenerative changes such as ligamentum flavum thickening, facet hypertrophy and close approximation of spinous processes, consistent with Baastrup's disease. An interspinous block was performed with fluoroscopy guidance. The patient experienced 100% relief of symptoms the following day, with persistent improvement 1 month later. She reports 1/10 pain and now able to walk greater than ten blocks pain free. This case highlights the importance of considering Baastrup's in the differential for lumbago. Early diagnosis can decrease use of unnecessary imaging and procedures.

Anatomy of Baastrup's Disease

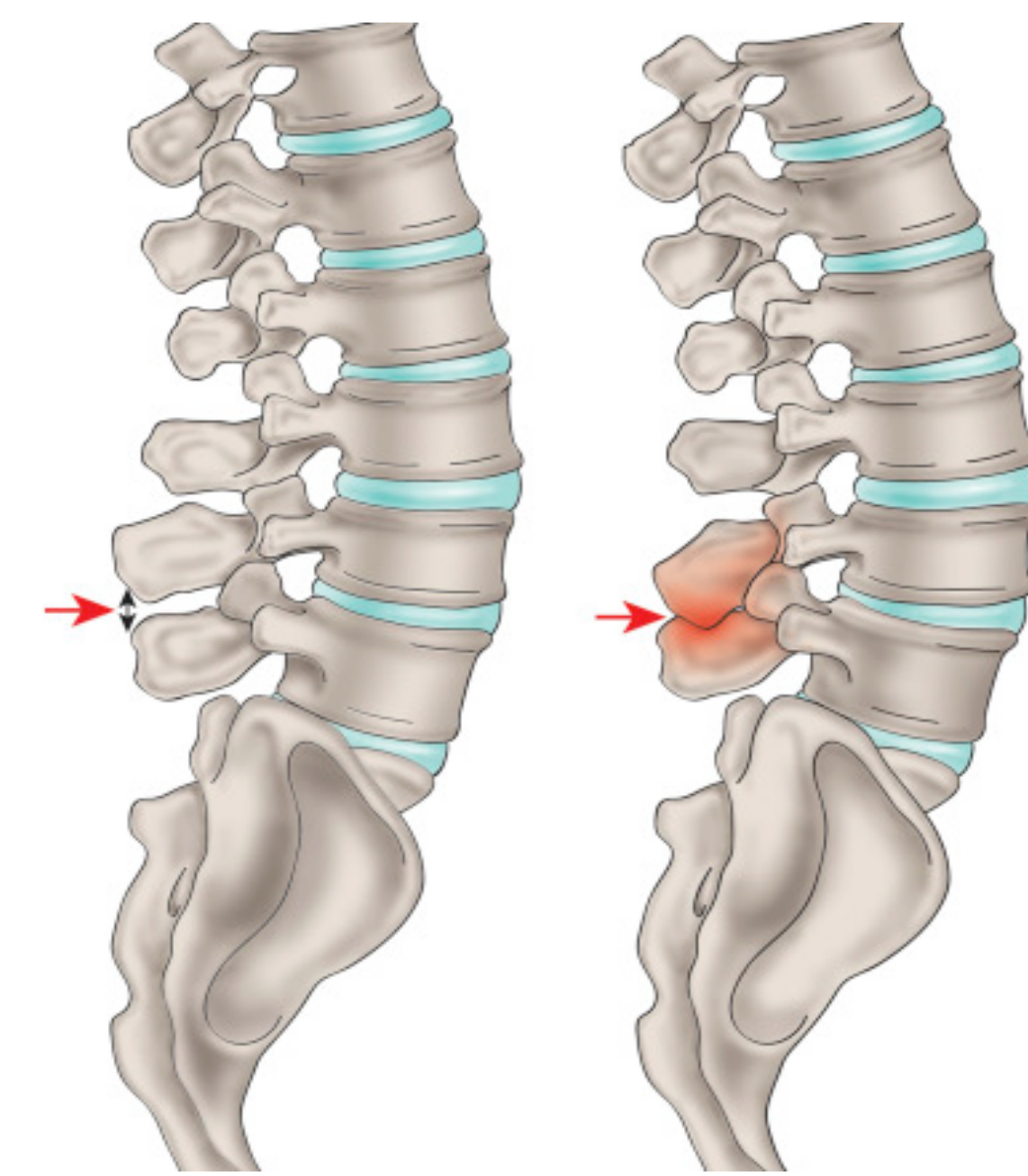
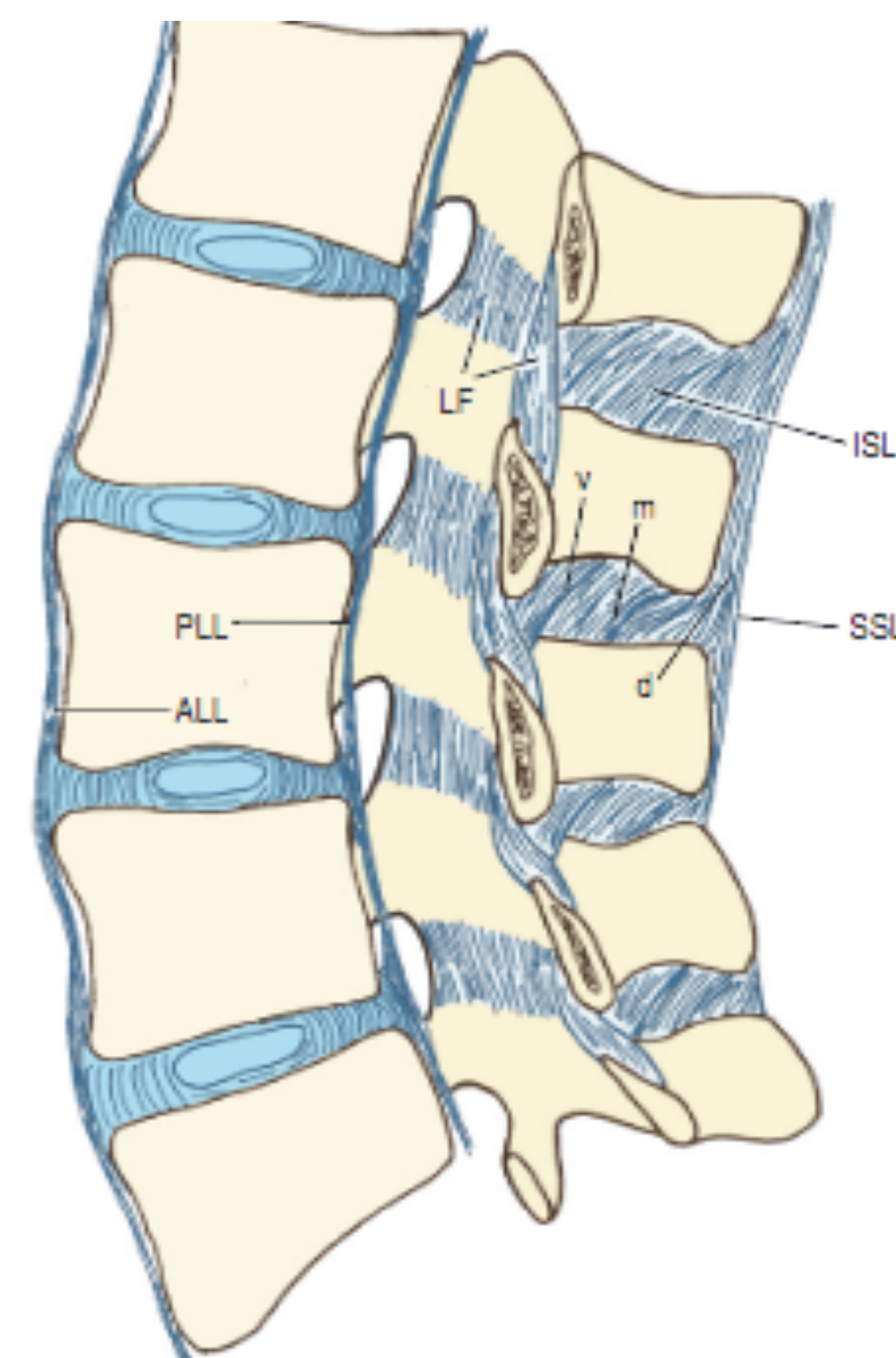


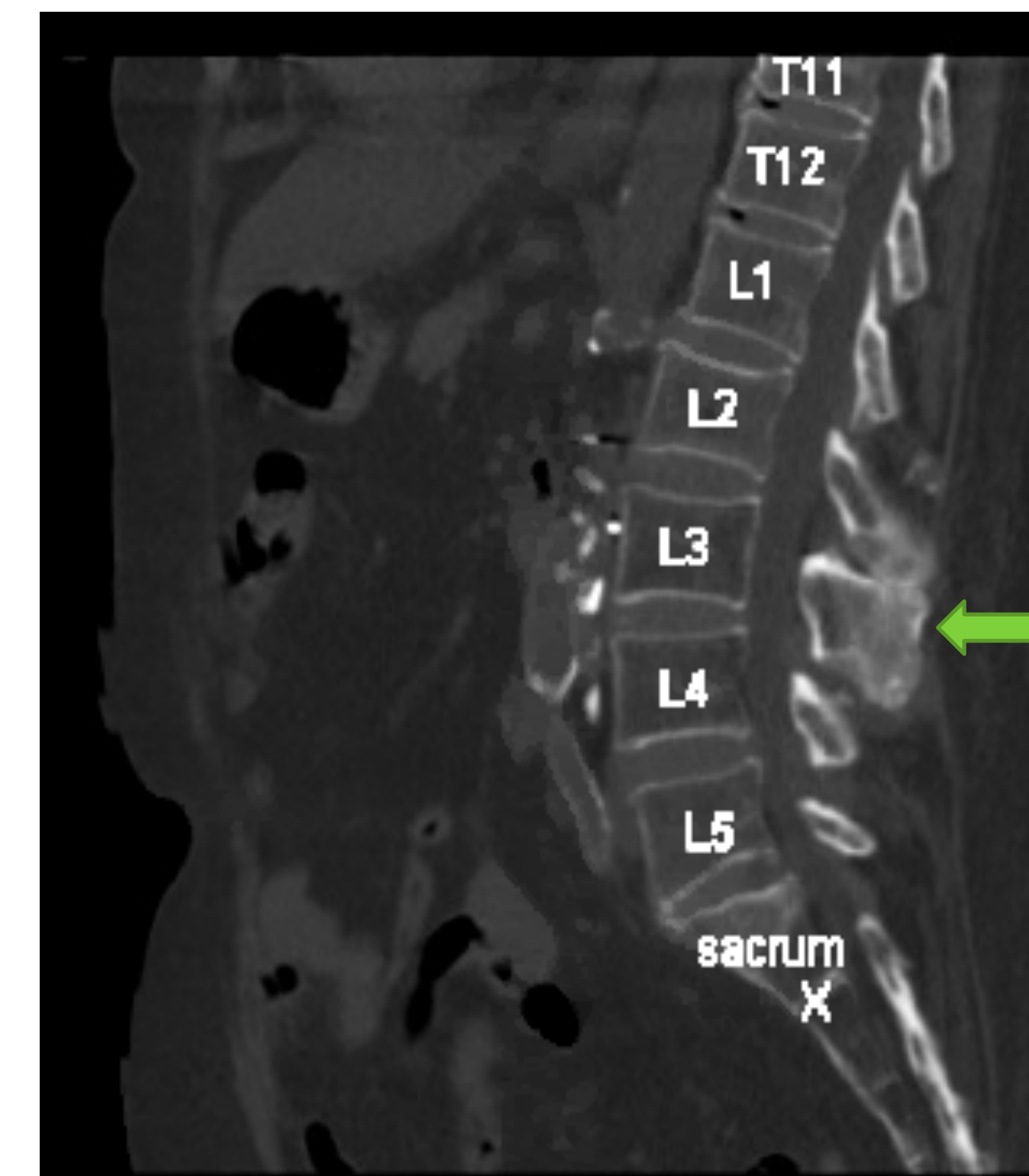
Image on left shows normal interspinous distance. Image on right shows adjacent spinous process compression in Baastrup's disease⁴.

Ligamentous anatomy of the spine

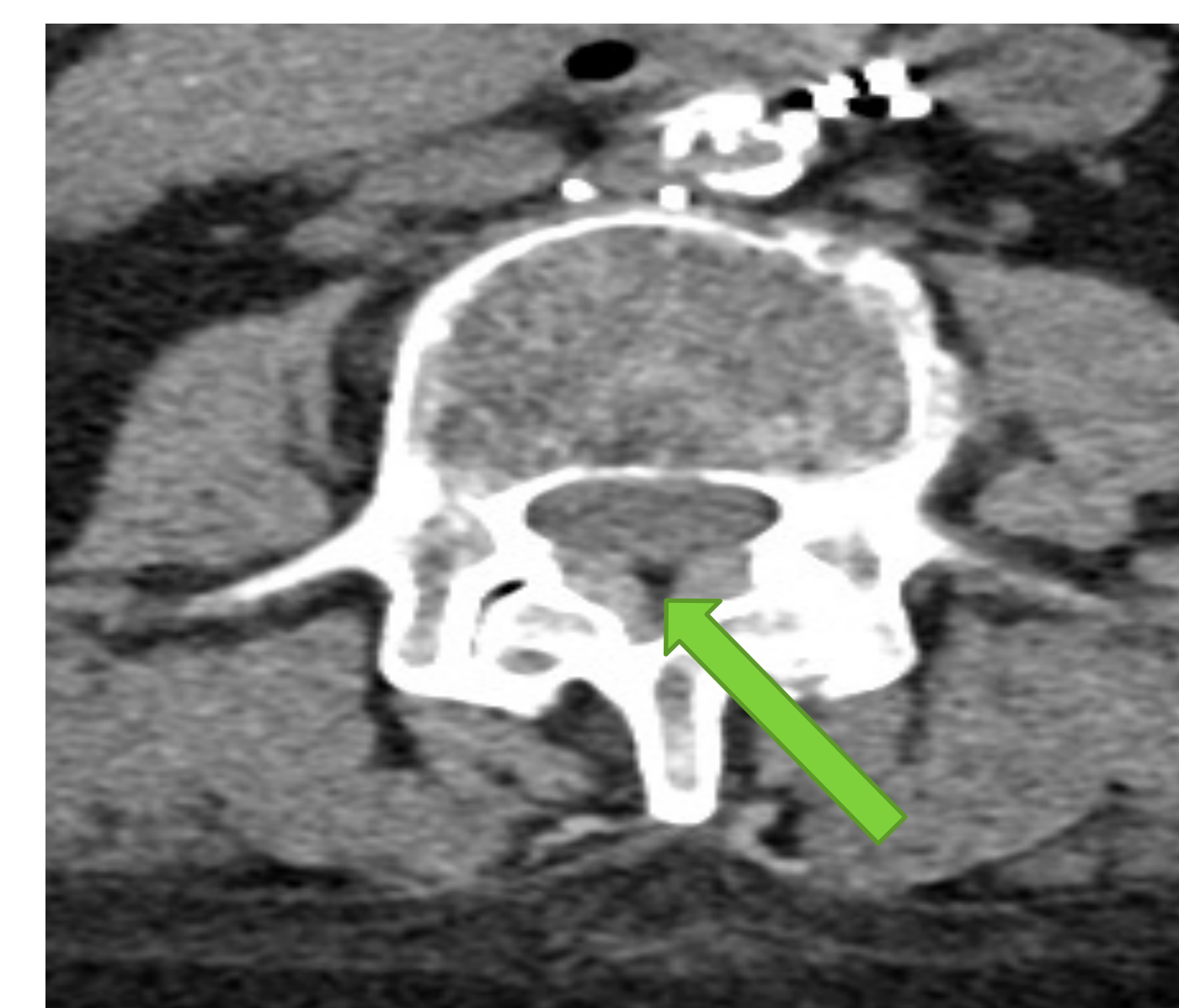


Anterior longitudinal ligament (ALL)
Posterior longitudinal ligament (PLL)
Ligamentum Flavum (LF)
Ventral (V) Medial (M) & Dorsal (D) parts of interspinous ligament (ISL)
Supraspinous ligament (SSL)

Imaging



CT lumbar showing close approximation of spinous process.



Green arrow showing ligamentum flavum thickening. This CT also shows facet hypertrophy and moderate, bilateral neural foraminal stenosis.



Lateral view of lumbar spine and fluoroscopic injection of contrast dye of interspinous ligament

Discussion

Baastrup's disease, also referred to as interspinous bursitis, is a common but often delayed diagnosis. Patients typically present with lumbar pain exacerbated by spinal extension and relief with spinal flexion. The literature reports incidence up to 80% in patients greater than 80 years old¹. Other risk factors include excessive lordosis, degenerative disc disease, and repetitive flexion and extension maneuvers⁵. Baastrup's syndrome has also been seen clinically in 6.3% of college athletes⁴. Treatment options include physical therapy, RFA, bursae excision, spinous process osteotomy and interspinous ligament injections using anesthetic and/or steroids³. It is also important to consider using upright or dynamic imaging as there is less lordosis in a non-weight bearing position.

Acknowledgements

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