CASE DISCUSSION: POSTOPERATIVE HEMATOMA

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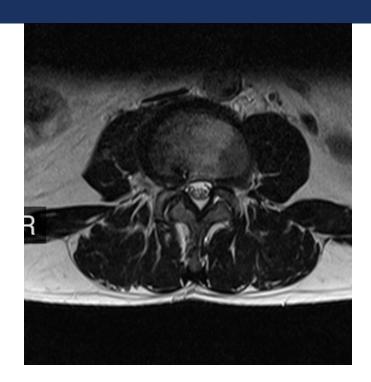
POSTOPERATIVE HEMATOMA CASE

- 50 y/o white male left lower extremity radicular symptoms.
- 2 previous back fusions at L2-3 bilateral approach in 2007 followed by a L4-5 fusion also by a lateral approach in 2009.
- MRI 3/19/20: L2-3 fusion and L4-5 fusion with broad based disc bulge at L3-4. There is a central to left paracentral herniation at L5-s I with left sided foraminal narrowing and facet hypertrophy.

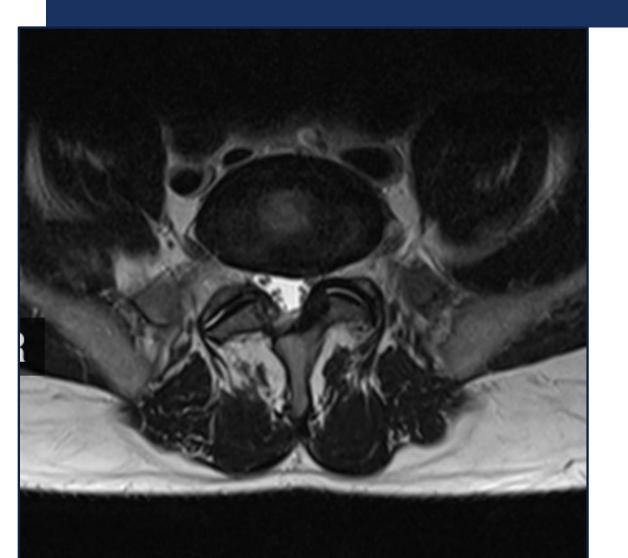
MRI REVIEW



Sagittal T2 image showing prior fusion surgery at L2-3 and L4-5 with disc herniation, modic changes and central canal stenosis at L3-4



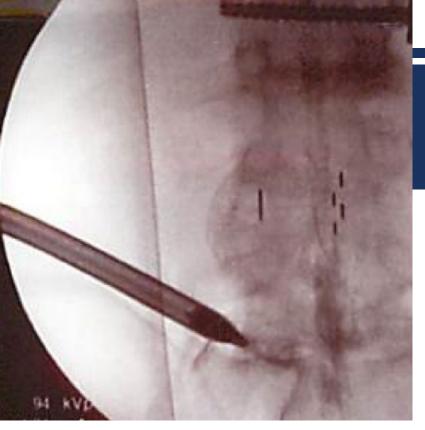
Axial T2 image showing right sided far-lateral disc herniation with central canal and bilateral foraminal stenosis at L3-4 on axial view

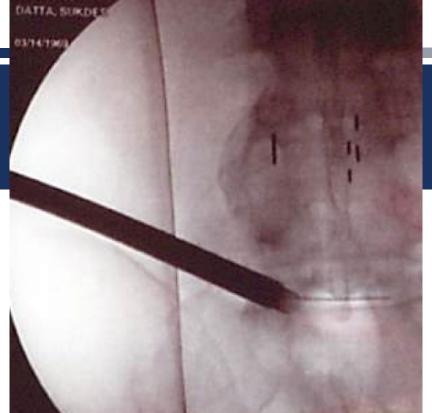


Axial T2 image showing left sided lateral recess and foraminal stenosis at L5-S1 as well prior laminotomy defect from previous decompression surgery on the right side.

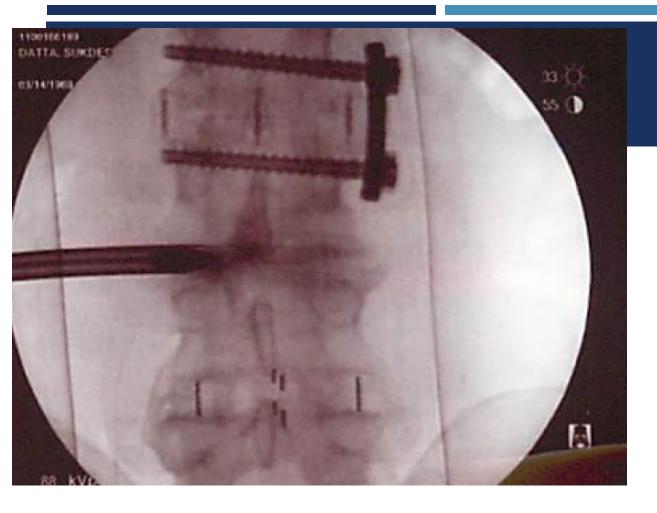
OPERATIVE TECHNIQUE

- left sided L3-4 and L5-S1 transforaminal percutaneous endoscopic lumbar discectomy (PELD) and foraminotomy.
- A 18-G needle was used 11 cm and 13 cm from the midline for L3-4 and L5-S1 respectively.
- The needle was docked at posterosuperior corner of the vertebral bodies. The starting point at L3-4 was more medial and flat making the trajectory steeper and parallel to the disc space.
- Whereas, due to the high iliac crest the starting point was high and lateral at L5-S1. The needle was directed caudally approximately at 30 degrees at L5-S1 to dock at the inferior edge of the foreman. A small skin incision (7-8 mm) was made at the entry point of the needle, which was then dilated with a hemostat.
- The tract was dilated using serial dilators along with gradual trephines to open up the foramen. A working channel was then inserted over the last dilator and docked into the foramen just outside the annulus. The superior articular process was trimmed and foraminotomy was performed using the Kerrison rongeur and a diamond burr (6000 rmp). Discectomy was also performed at these levels.









POST OPERATIVE HEMATOMA AND MANAGEMENT

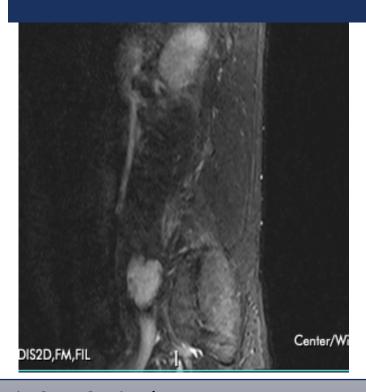


Fig 2a – Sagittal post-contrast T1 MRI image showing non-enhancing hematoma extending longitudinally along the left lower psoas muscle



 Axial post-contrast T1 MRI image showing nonenhancing hematoma spanning across the left lower psoas muscle

- Acute radicular pain developed after the surgery.
- Postoperative imaging revealed small collection in psoas region (4x3x1.5 cm).
- Non enhancing on post contrast T1
- Non infections
- Unable to drain the collection under CT guidance due to viscous nature of collection.
- Discectomy portion was clean and separate from the hematoma area
- Improved over next few weeks without further intervention.