

Unilateral Biportal Endoscopic (UBE) for Preservation of Flip Flavum Ligament in Lumbar Herniated Disc Herniation

- T Arief Dian
- Surabaya, Indonesia

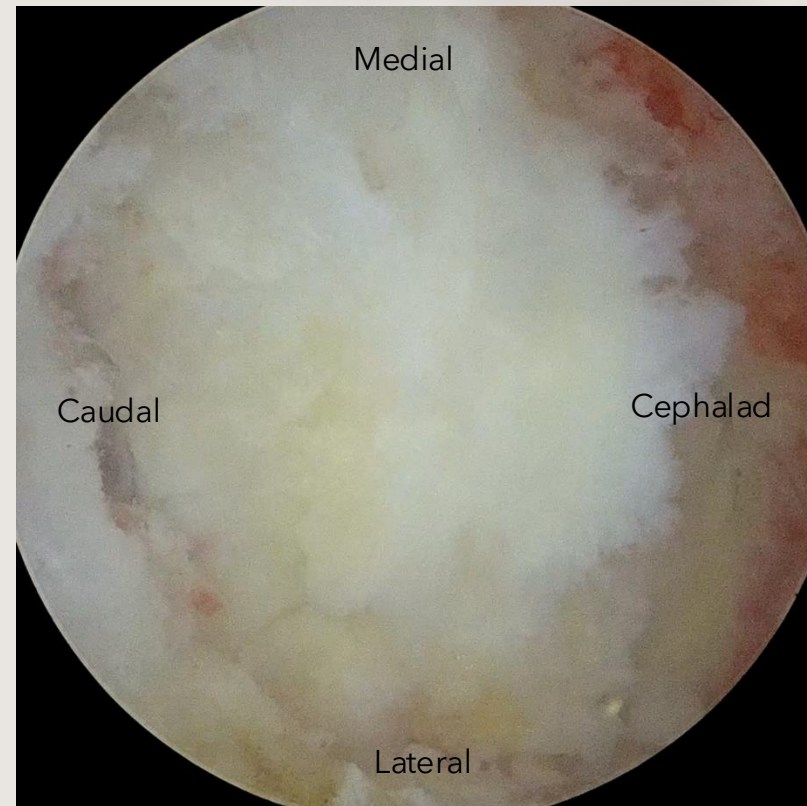
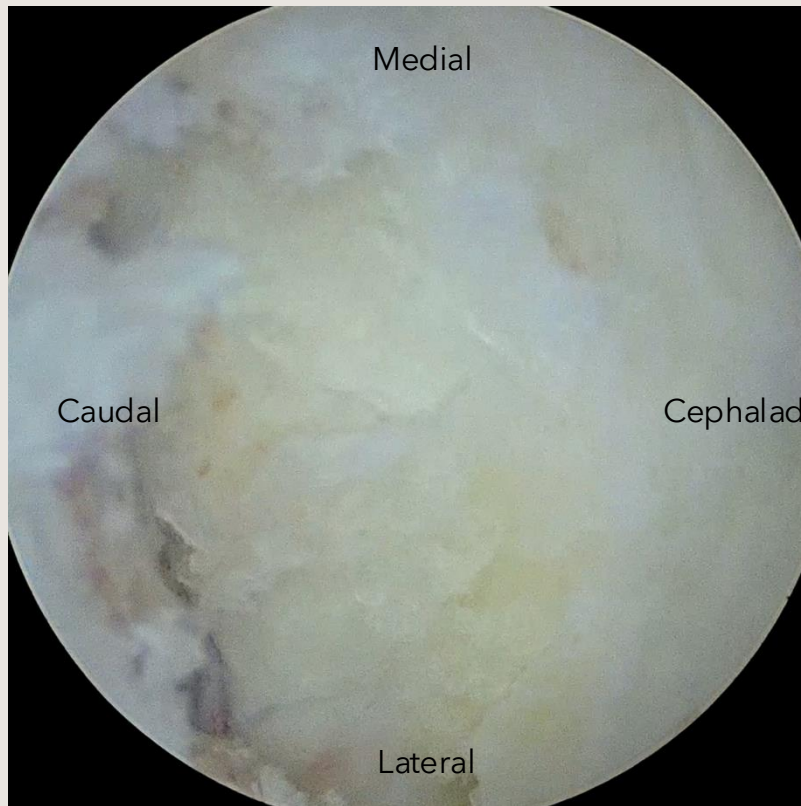
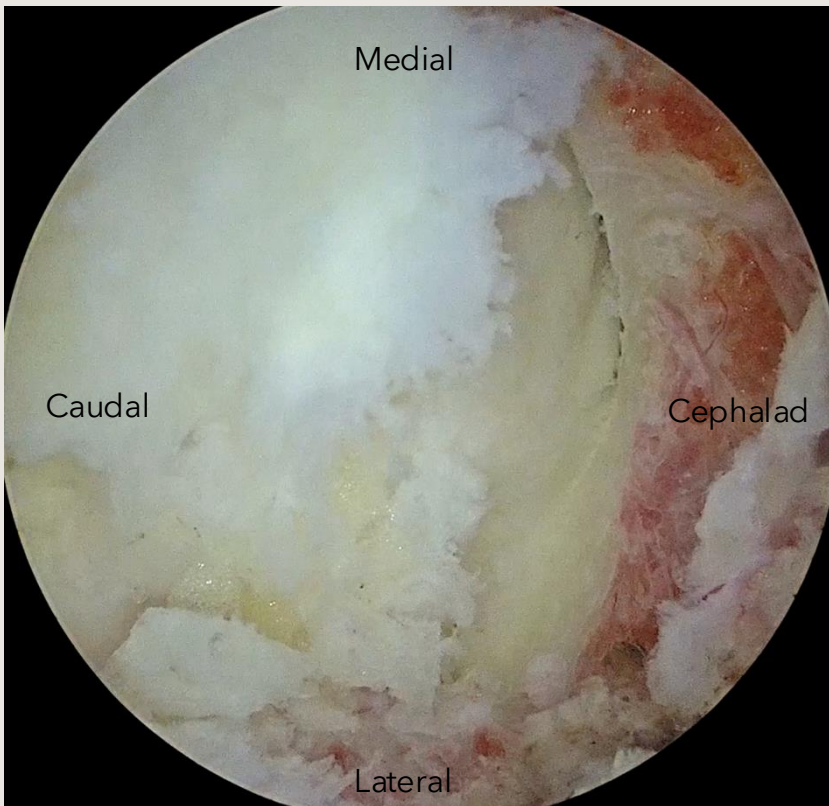
Purposes

- Microdiscectomy has long been the gold standard for surgical treatment of the lumbar disc herniation. In microdiscectomy, preserve the flavum have been reported.
- While, recent technology have applied the endoscopic techniques, such as Unilateral Biportal Endoscopic (UBE) spine surgery.
- By this method, we can perform the UBE by flip the flavum to preserve the flavum.
- As known that the epidural fibrosis is still a common complication that influence the outcome and make a difficult & challenge if revision surgery is needed.
- This study is to show that this technique could be an option to prevent the epidural fibrosis in the future.

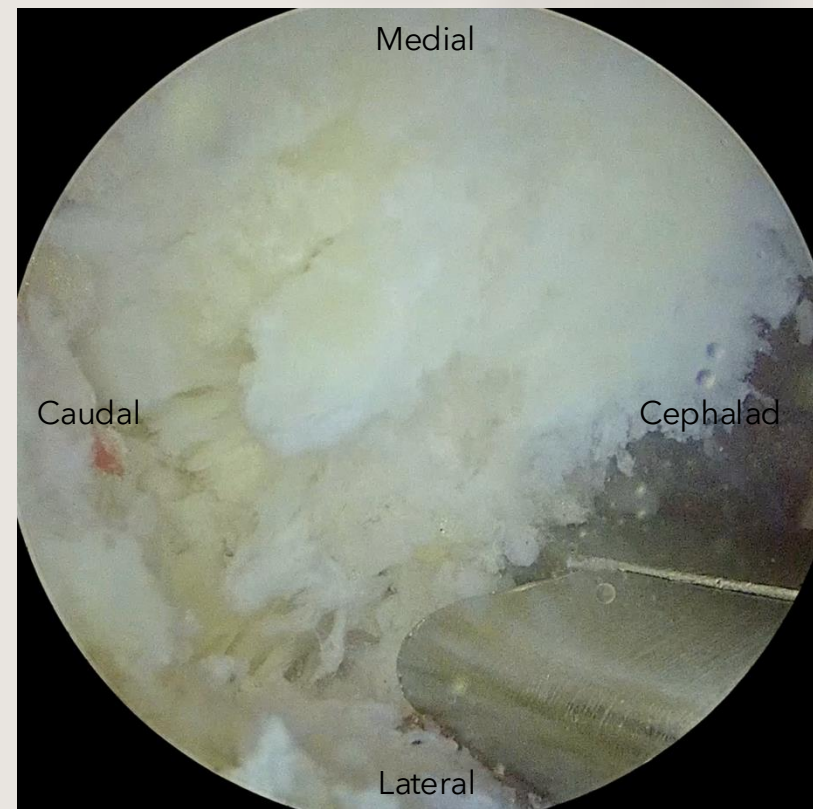
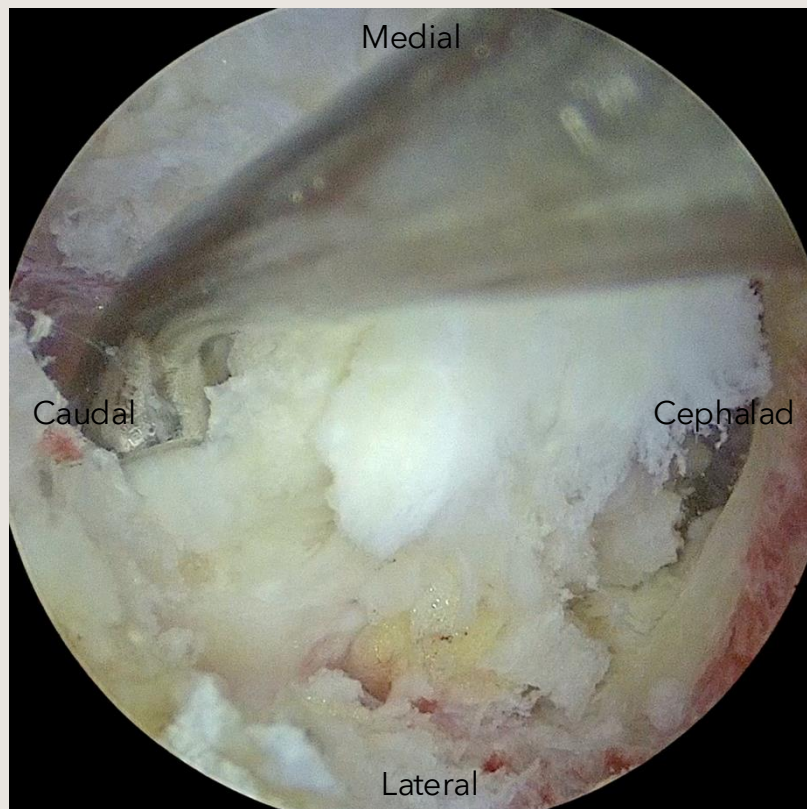
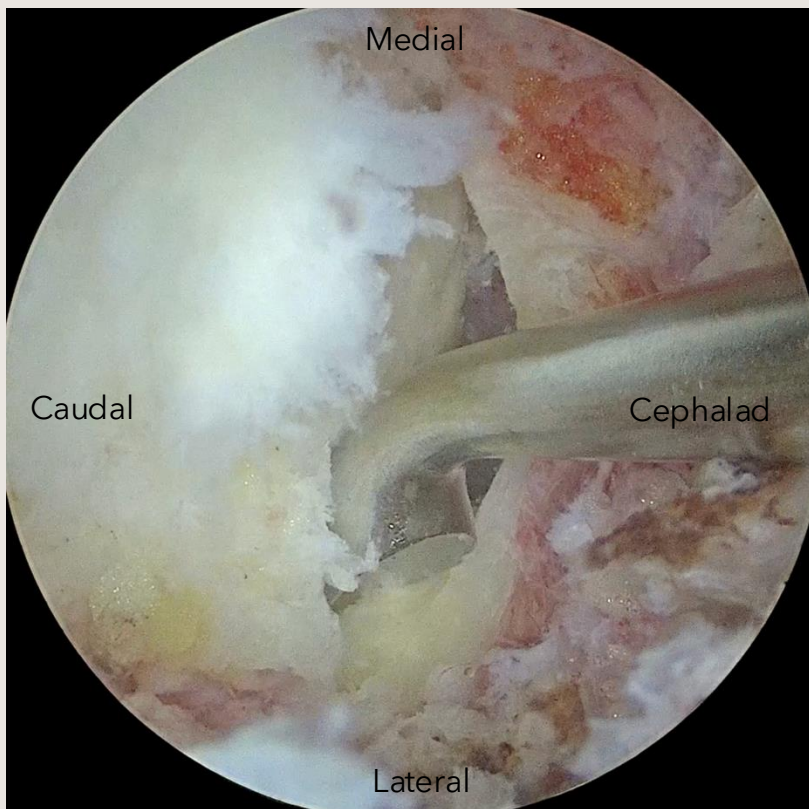
Materials and methods

- This study showed 10 patients diagnosed with lumbar disc herniation who underwent surgery during 2025 in my hospital.
- The patients underwent endoscopic surgery with flavum preservation.
- Preoperative imaging, including X-rays, computed tomography, and magnetic resonance imaging were performed.
- Functional scores evaluate with Visual Analog Scale. Postoperative magnetic resonance imaging was conducted at three months to evaluate epidural fibrosis.

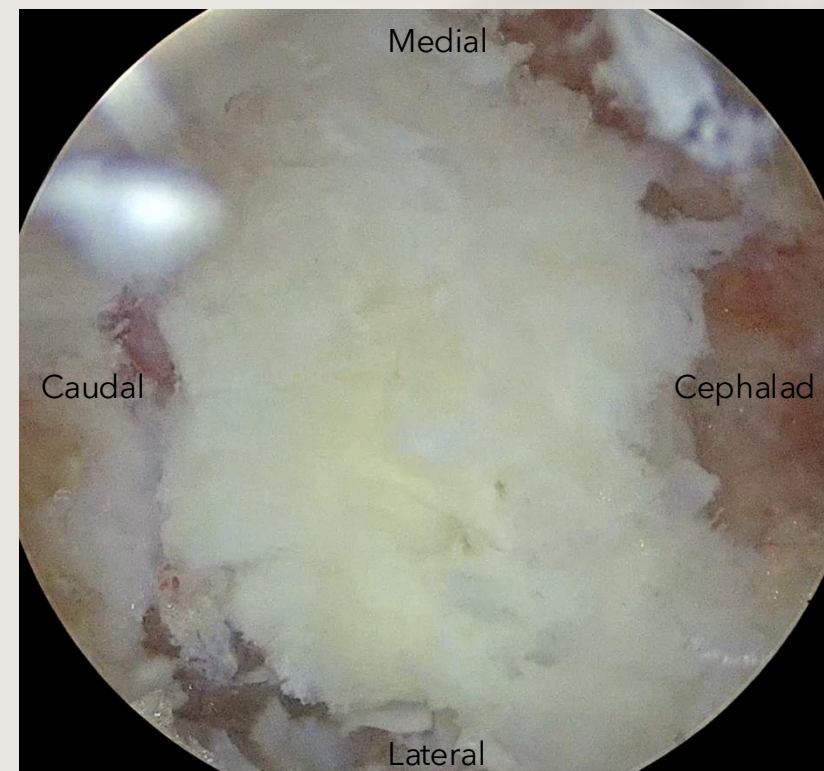
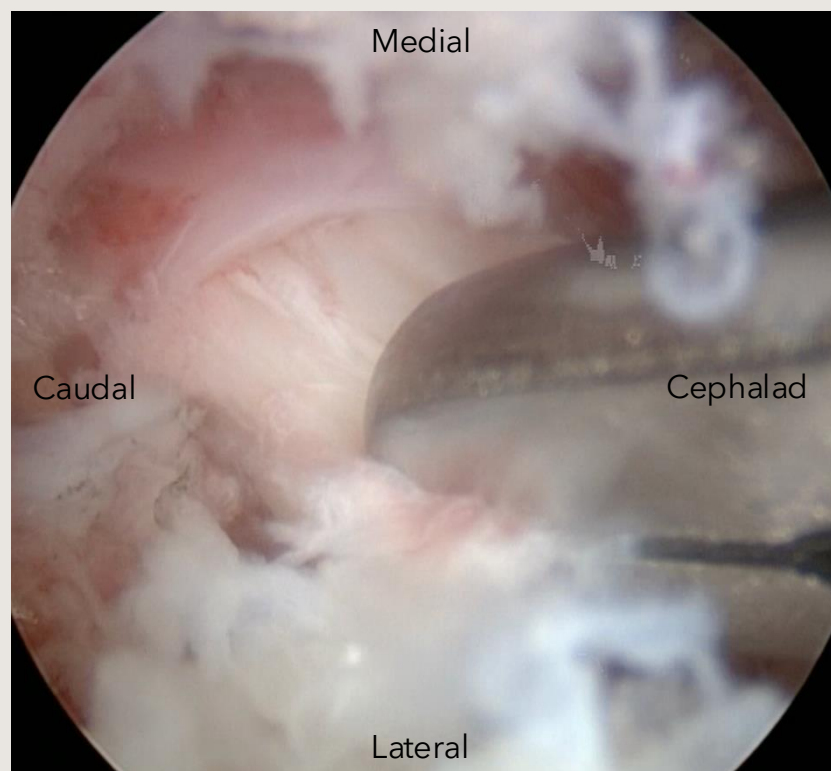
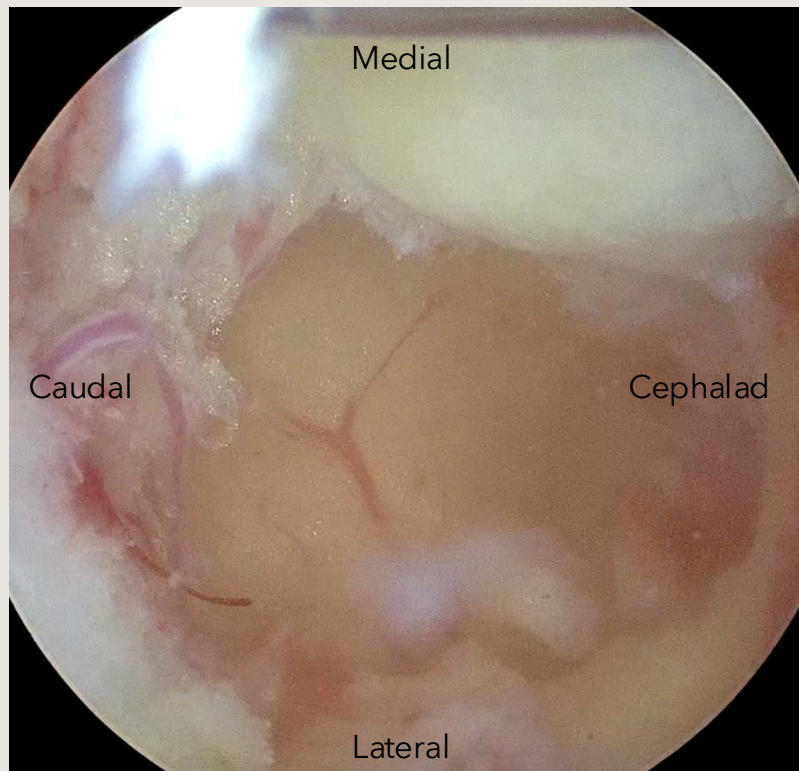
Surgical Techniques



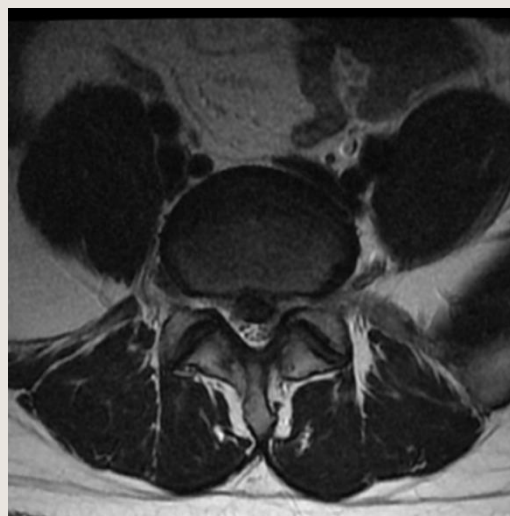
Surgical Techniques



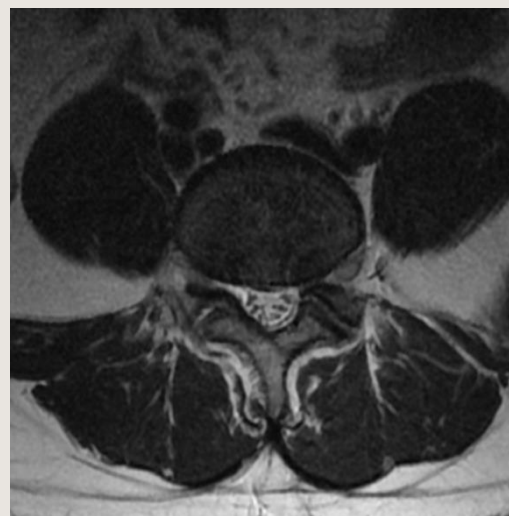
Surgical Techniques



Pre Op



Post Op



Result

- The rate of epidural fibrosis was significantly lower in the flavum sparing.
- Functional scores and radiology significantly improved postoperatively in evaluation

Conclusion

- The preservation of flavum during UBE surgery make less epidural fibrosis.
- The results suggest that preserving flavum during endoscopic spine surgery may reduce epidural fibrosis formation and promote better recovery, supporting the benefits of minimally invasive techniques in lumbar disc herniation surgery.



Thank You

Seoul

KSSS 2026