challenging cases in MED

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MED

During 18 years in more than 3000 patients we collect difficult and challenging cases in MED.

How can we predict problem before planning surgery?

ED

- Transforaminal
- Interlaminar
- Transflaval

MED

 In this procedure first detected right level then ligamentum flavum exposed with serial dilators and doing partial flavectomy and foraminotomy and diskectomy

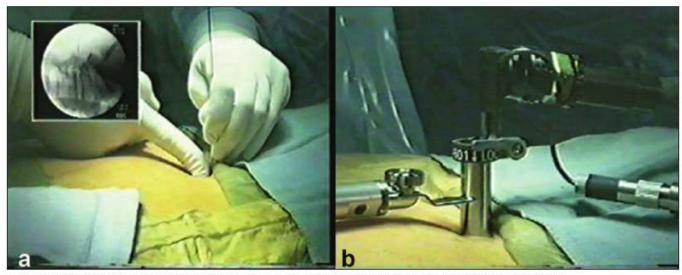


Figure 1: Intraoperative photograph shows (a) guide wire insertion (b) insertion of the tubular retractor and endoscope

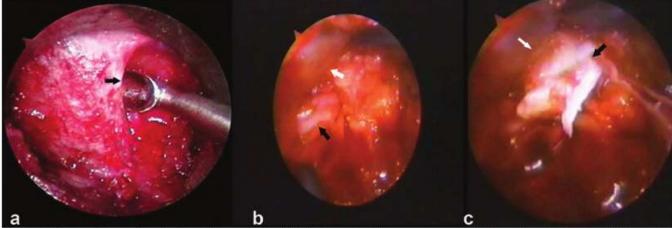


Figure 2: Intraoperative photograph shows (a) scope view of the laminar edge. The arrow shows the inferior edge of the lamina. (b) Scope view of the dural sleeve (white arrow) and nerve root (black arrow) (c) Scope view of the sequestrated disc (black arrow)

Difficult cases in MED

- 1-Transitional vertebra
- 2-Spina bifida occulta
- 3-Conjoined roots
- 4-Medial facet hypertrophy
- 5-lateral recess stenosis

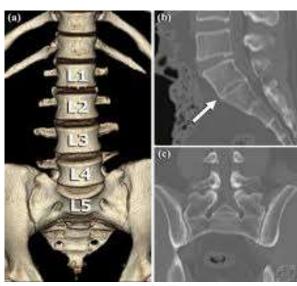
Difficult cases in MED

- 6-Talls patients
- 7-Upper levels
- 8-Upward or dowenward migrations of NP more than 2 cm
- 9-More thick iliac crest and I5-S1 HNP
- 10-Centrolateral HNP
- 11-Axilary HNP
- 12- calcified HNP

Transitional vertebra

- We must be careful from misslevel manipulation
- With C-Arm the accurate level determined then planned the surgery





Spina bifida occulta

- In this cases we must be careful during insertion of trocars.
- Dilators may pierce LF then injured dura and intrasacal nerve roots



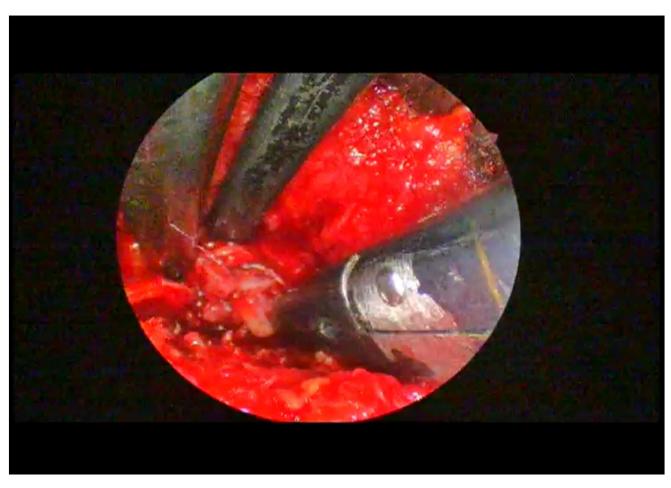
Conjoined roots

- Surgeon must be careful when do flavectomy and manipulation of lateral recess from pinch of root
- In cutting of PLL for nucleotomy we may cut accessory nerve root

Axillary HNP

 When HNP is in shoulder of root our access is easy but in axilla of root we may injured root and retraction of root to midline is difficult

Conjoined root and axillary HNP



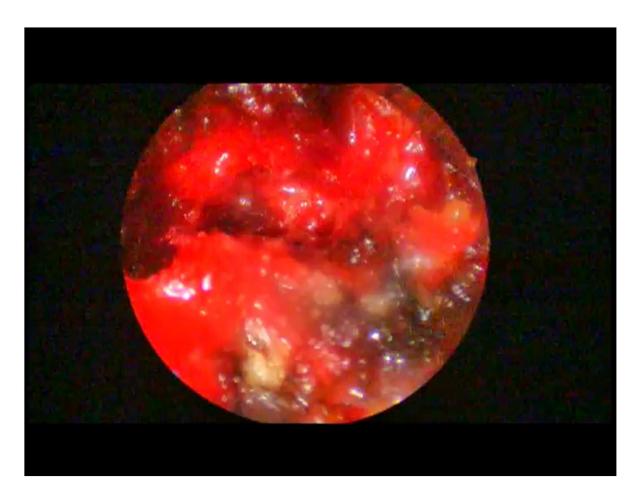
Medial facet hypertrophy

• In this cases access to LF difficult because the medial facet fill more part of last trocar and only small part of LF is in our view and we must resected more part of medial facet to open a trajectory to epidural

space



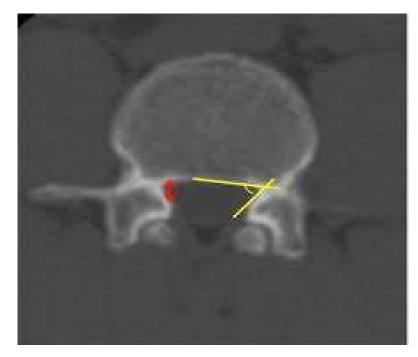
Medial facet hypertrophy



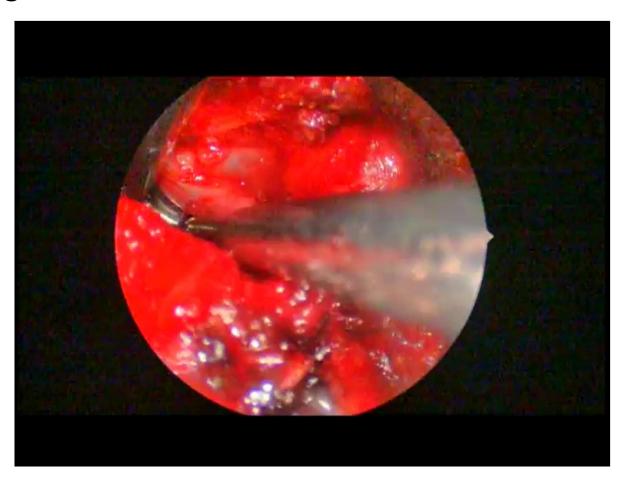
Lateral recess stenosis

• Like medial facet hypertrophy in this cases surgeon must be careful from pinch of root in this area





Medial facet hypertrophy and lateral recess stenosis



Talls patients

- In talls patients space between upper and lower lamina is wide and we must resected more part of LF especially near upper lamina
- •The last trocar in this patient must be 19 or 21 millimeter instead 16

Upper levels

 Like talls patient in this cases we must working near upper lamina for acces to disk

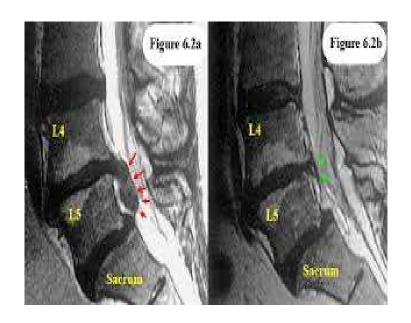
space



HNP upward or dowenward migration

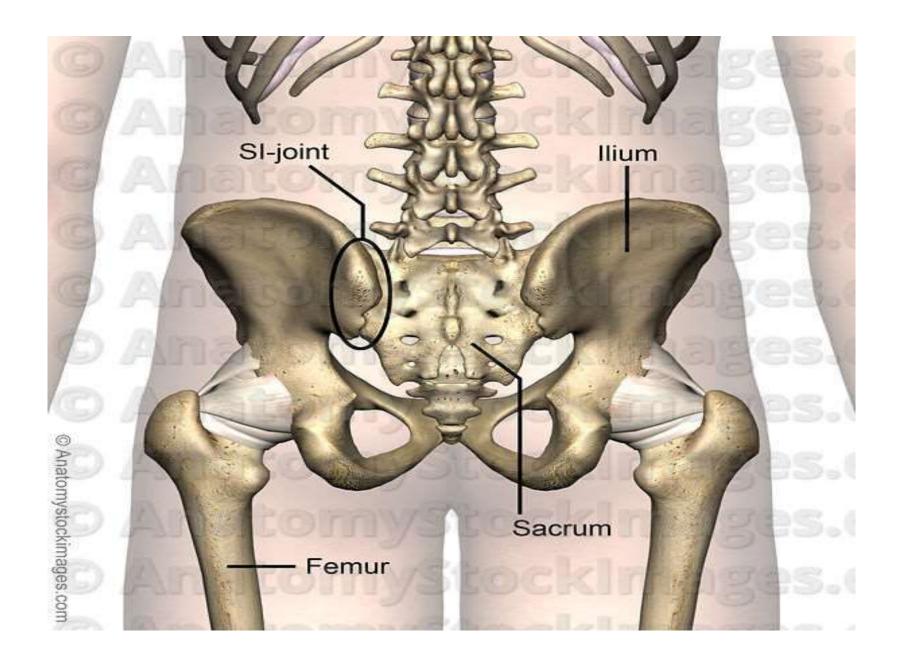
 When migration of HNP is more than 2 Cm, access to sequestered part needs resection of some parts of upper or lower lamina although we can resected this part with hooks





More thicked iliac crest and medial facet hypertrophy and L5-S1 HNP

- •In this condition distance between tip of final trocar and LF is too much and we can not insert trocar deeper in contact with LF
- The space between s1 facet and processus spinosus of s1 and iliac crest is narrow



Centrolateral HNP

 In this patients we need resection more part of LF toward midline for accessing to disk space and must be carefull from dura

Centrolateral HNP

