The management of degenerative Spondylolisthesis in association with spinal canal stenosis

Degenerative Spondylolisthesis most commonly occurs at L4/L5 level and is due to degenerative changes of the facet joint and disc space (localized hyper mobility, , sagittal plane orientation of the facets, disc degeneration). Symptoms are due to lateral recess stenosis. Usually Meyerding grade 1 and 2. Treatment options include

Decompressive laminectomy with partial facetectomy without fusion. Is effective in relieving the pain and in sufficient in most cases particularly when the disc space is narrow and there are marginal osteophyte and calcified ligament (stabilizing factors), old age with decreased activity. Less risk of complications, however there is potential risk of instability and slippage.

Decompressive laminectomy, facetectomy and fusion (pedicle screws w/wo PLIF): in patients with high risk of slippage (large disc requiring disectomy, absence of marginal osteophytes, obesity, female sex, relatively young age, greater level of activity, sagittal orientation of facet joints, mobility on preoperative flexion/extension films). Pedicle screw fixation is a stable construct as it provides 3 column fixations, however it has 10% potential risk of complications from misplacement of the screws (injury to nerve root, thecal sac, CSF leak, infection etc...) in metanalysis of the literature the outcome was marginally better with instrumented