

TRANSFORAMINAL ENDOSCOPIC DISCECTOMY: A TARGETED SPINAL SURGERY**Khan ES¹**, Kow RY^{1,2,*}¹International Islamic University Malaysia, Kuantan, Malaysia²Hospital Tengku Ampuan Afzan, Kuantan, Malaysia*Corresponding author email: renyi_kow@hotmail.com**Introduction**

Open discectomy has been the gold standard of care for cases of the prolapsed intervertebral disc. Tissue dissection is unavoidable in order to access the pathologic disc material. After skin incision, subcutaneous fat tissue, paraspinal muscles, ligamentum flavum, epidural fat, dura and nerve roots have to be encountered before reaching the disc material. With the in-out transforaminal endoscopic technique, only skin and subcutaneous tissue need to be bridged before reaching the disc material. Also known as the targeted surgical technique, this technique minimised the trauma to the soft tissue. We present three case series of the prolapsed intervertebral disc which was treated with transforaminal endoscopic technique. Case 1: 49-year-old lady presented with a one-year history of low back pain and left lower limb sciatica. Straight leg raising sign was positive. MRI showed 2 level disc bulge at L4L5, L5S1 with annular tear at L5S1. At two weeks, post-op pain was improved by 60%, and SLR test was negative. Case 2: 26-year-old lady presented with six months history of low back pain and left lower limb sciatica. Straight leg raising sign was positive. MRI showed extruded disc at L4L5. At post-op day one, her sciatica completely resolved and SLR test was negative. Case 3: 28-year-old lady presented with eight months history of low back pain and left lower limb sciatica. Straight leg raising sign was positive. MRI showed extruded disc at L5S1 with annular tear. At post-op day one, her sciatica completely resolved and SLR test was negative. All three patients underwent transforaminal discectomy. Case 1 and 2 were done under monitored anaesthesia control (MAC), and case 3 was done under epidural anaesthesia. All three patients had satisfactory pain relief. The 1st patient had longer recovery period possibly because of its disease chronicity. Early recovery is expected hence early return to work can be accomplished. In the future, this might be the gold standard of treating prolapsed intervertebral disc.

Keywords: Transforaminal Endoscopic Discectomy, Spinal Surgery