

8th International Conference on
Spine and Spinal Disorders

March 18-19, 2022 | Webinar

Minimally invasive access for Intradural Extramedullary Tumor Resections: Can this be done safely?

John C Liu

University of South California, US

Introduction: Minimally invasive spinal techniques have become popular amongst spine surgeons over the last 20 years. In the United States, as oppose to endoscopic approach, the utilization of sequential dilation of paraspinal musculature and tubular retractors have become the mainstay of minimally invasive spine techniques. The advantages of MIS tubular access have been well published including shorter hospital stay, decrease utilization of perioperative opioid pain medications, decrease blood loss and infections risks.

Methods: Over 40 patients diagnosed with intradural extramedullary thoracic and lumbar tumors were recommended to undergo MIS tubular access tumor resections. Standard MIS unilateral laminotomy and intradural access were utilized. Microscopic techniques were utilized for identification and biopsy and removal of the tumors. Primary dura mater closures utilizing MIS techniques were then performed.

Results: All patients received post-operative MRI within 48 hours. All patients except one had complete removal of tumor. No patients had neurological changes post-operative. No incidences of CSF leak or psuedomenioncele were identified. Tumor diagnosis included schwannoma, meningioma and myxopapillary ependymoma. The average stay at hospital was 3 days.

Conclusion: Intradural extramedullary tumors can be successfully removed utilizing MIS tubular access and microscopic dissection. Identification of the ideal candidate for MIS resection is of the upmost importance for a successful and safe removal. Size, characteristics of the tumor as well as its relationship to the spinal cord or caudal equina are important factors to consider.

e: john.liu@med.usc.edu