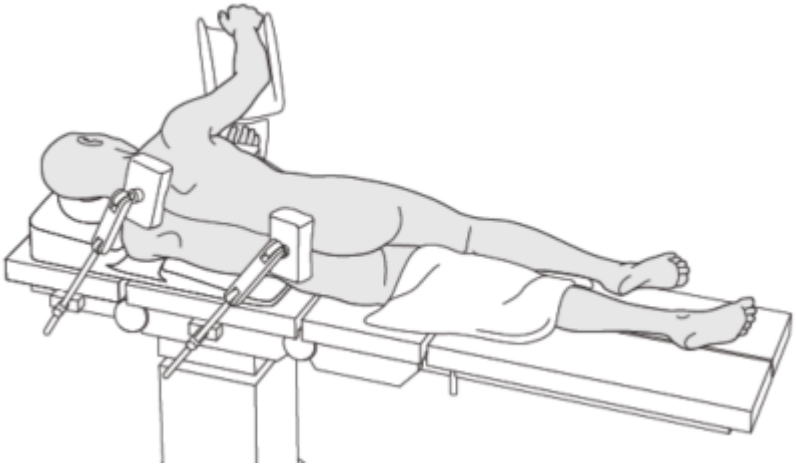
Lateral decubitus position

- Prone positioning improves surgical access to the thoracolumbar junction - An MRI pilot study
- Key Considerations in Surgical Decision-Making on the Side of Approach for Lumbar Lateral Transpsoas Interbody Fusion Techniques
- Single-Position Prone Transpsoas Lateral Interbody Fusion at L4-L5: Technical Pearls
- Advances in Lateral Interbody Fusion and Single Position Surgery
- Ultrasonogram-Guided Continuous Quadratus Lumborum Block as Pain Management in Pediatric Kidney Transplant Recipients: A Case Series
- Anatomical Location of the Bowel in Different Surgical Positions: Implications for Lateral Access in Prone Single-Position Surgery
- Prone Transpsoas Lumbar Interbody Fusion for Degenerative Disc Disease
- Prone Lateral Transpsoas Approach to the Spine: A Technical Guide for Mastery



The lateral position can be used for access to the posterior parietal and occipital lobes and the lateral posterior fossa including tumors at the cerebellopontine angle and aneurysms of the basilar artery and vertebrobasilar junction. A vacuum mattress that can be molded to the patient‘s anatomic features greatly facilitates the maintenance of a stable lateral position.

An axillary roll is important for preventing brachial plexus injury.

A slight head rotation to the ipsilateral side allows moving the coronal plane of both shoulders away from the surgical working space allowing the surgeon enough maneuvering freedom.

Lateral Single Position surgery (LSPS) and circumferential fusions have similar outcomes at 2 years postoperatively, while reducing perioperative complications, and improving perioperative efficiency and safety [1)]

Complications

Lateral decubitus position complications.

Case series

In 71 patients with cerebellopontine angle lesions undergoing surgery between January 2003 and December 2010 using the lateral suboccipital approach. One patient postoperatively developed rhabdomyolysis, and another presented with transient peroneal nerve palsy on the unaffected side. Stage I and II pressure ulcers were noted in 22 and 12 patients, respectively, although neither stage III nor more severe pressure ulcers occurred. No patients experienced cervical vertebra and spinal cord impairments, brachial plexus palsy, or ulnar nerve palsy associated with rotation and flexion of the neck. Strategies to prevent positioning-related complications, associated with lateral positioning for the lateral suboccipital surgical approach, include the following: atraumatic fixation of the neck focusing on jugular venous perfusion and airway pressure, trunk rotation, and sufficient relief of weightbearing and protection of nerves including the peripheral nerves of all four extremities [2].

1)
Buckland AJ, Braly BA, O'Malley NA, Ashayeri K, Protopsaltis TS, Kwon B, Cheng I, Thomas JA. Lateral decubitus single position anterior posterior surgery improves operative efficiency, improves perioperative outcomes, and maintains radiological outcomes comparable with traditional anterior posterior fusion at minimum 2-year follow-up. Spine J. 2023 Jan 12:S1529-9430(23)00004-9. doi: 10.1016/j.spinee.2023.01.001. Epub ahead of print. PMID: 36641035.

2)
Furuno Y, Sasajima H, Goto Y, Taniyama I, Aita K, Owada K, Tatsuzawa K, Mineura K. Strategies to prevent positioning-related complications associated with the lateral suboccipital approach. J Neurol Surg B Skull Base. 2014 Feb;75(1):35-40. doi: 10.1055/s-0033-1353366. Epub 2013 Aug 21. PubMed PMID: 24498587.