Lateral semisitting position

- Comparing surgical outcomes of the semisitting versus lateral position in large vestibular schwannoma surgery: a randomized clinical trial
- Diverse accessory techniques and working corridors to enhance the retrosigmoid approach: a versatile option for the treatment of meningiomas of the petroclival region
- Semi-sitting position and retrosigmoid approach for a large petroclival meningioma resection: 3-dimensional operative video
- Surgical correction of a chin-on-abdomen deformity due to ankylosing spinal deformity and obesity: illustrative case
- Microsurgical Resection of a Midbrain Cavernous Malformation via the Paramedian Supracerebellar Infratentorial Translateral Mesencephalic Sulcus Approach Using the Dynamic Lateral Semisitting Position: Two-Dimensional Operative Video with 3-Dimensional Anatomical Models
- Surgical management of a large cystic trochlear nerve schwannoma mimicking a brainstem glioma: a case report
- Avoidance and Management of Complications in Retrosigmoid Approach to Vestibular Schwannomas
- Right-to-left-shunts in patients scheduled for neurosurgical intervention in semi-sitting position - a literature review based on two case scenarios

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The lateral semisitting position involved placing the patient in a lateral position first (side of tumor up) followed by flexing the torso to 45° and tilting the head toward the opposite shoulder by 20°. This was done to the point where the zygomatic arch is almost parallel to the floor. The chin should be 2 finger breadths away from the sternum as extreme flexion would compromise venous return from the head. The distance was kept between the planned incision and the patient's ipsilateral shoulder, which will otherwise limit the surgeon's range of motion later in the case [1)].

The risk of venous air embolism (VAE) is the major deterrent for surgeons and anesthesiologists, despite the fact that sitting position and semisitting positions are commonly used in these operations.

To demonstrate a reduction in the risk of VAE and tension pneumocephalus throughout the operation period while taking advantage of the semisitting position.

In a study, 11 patients with various diagnoses were operated on the Department of Neurosurgery, Ondokuz Mayis University, School of Medicine, Samsun, Turkey using the supracerebellar approach in the dynamic lateral semisitting position. They used end-tidal carbon dioxide and arterial blood pressure monitoring to detect venous air embolism.

None of the patients had clinically significant VAE in this study. No tension pneumocephalus or major complications were observed. All the patients were extubated safely after surgery.

The ideal position, with which to apply the supracerebellar approach, is still a challenge. In the study, Durmuş et al. presented an alternative position that has the advantages of sitting and semisitting positions with a lower risk of venous air embolism [2)].

1)
Velho V, Naik H, Bhide A, Bhople L, Gade P. Lateral Semi-sitting Position: A Novel Method of Patient's Head Positioning in Suboccipital Retrosigmoid Approaches. Asian J Neurosurg. 2019 Jan-Mar;14(1):82-86. doi: 10.4103/ajns.AJNS_203_17. PMID: 30937014; PMCID: PMC6417342.
2)
Durmuş YE, Kaval B, Demirgil BT, Gökalp E, Gurses ME, Varol E, Gonzalez-Lopez P, Cohen-Gadol A, Gungor A. Dynamic Lateral Semisitting Position for Supracerebellar Approaches: Technical Note and Case Series. Oper Neurosurg (Hagerstown). 2023 May 31. doi: 10.1227/ons.0000000000000758. Epub ahead of print. PMID: 37255298.