

The approach offers a magnified view of this region and inflicts minimal damage to the temporal bridging veins while entering the [transverse sinus](#) no more than 5mm anterior to Citelli's angle. The approach allows for visualization of CN IV as an important anatomical landmark, while preserving the venous integrity of posterior cavernous sinus.

The combined petrosal approach is one of the most versatile skull base approaches to the middle and posterior fossa, and it can be used to address complex pathologies of the [petroclival region](#). Detailed knowledge of its technical nuances and applications is essential for any skull base surgeon ¹⁾.

The combined [petrosal approach](#) is a suitable technique for the resection of medium-to-large [petroclival meningiomas](#) (PCMs), and suited for patients with serviceable hearing on the side of the lesion.

This approach enhances petroclival exposure and the degree of tumor resection, especially in the area of the [petroclival junction](#), middle clivus, apical petrous bone, posterior cavernous sinus, and Meckel's cave. The combined petrosal approach also allows better visualization of the contralateral side and the ventral brainstem, which facilitates safe dissection of the tumor from the brainstem, the basilar artery, and the perforators. If a patient has an early draining bridging vein to the tentorial sinus (before it reaches the transverse-sigmoid junction) or a prominent sigmoid sinus and jugular bulb, the combined petrosal approach provides significant working space ²⁾.

see [Combined posterior transpetrosal approach](#).

¹⁾

Janjua MB, Caruso JP, Greenfield JP, Souweidane MM, Schwartz TH. The combined transpetrosal approach: Anatomic study and literature review. J Clin Neurosci. 2017 Jul;41:36-40. doi: 10.1016/j.jocn.2017.03.015. Epub 2017 Apr 1. Review. PubMed PMID: 28377283.

²⁾

Cho CW, Al-Mefty O. Combined petrosal approach to petroclival meningiomas. Neurosurgery. 2002 Sep;51(3):708-16; discussion 716-8. PubMed PMID: 12188949.

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