

In a study, Tayebi Meybodi et al., sought to develop a hybrid technique based on localization of the [optic strut](#) (OS) to combine the advantages and avoid the disadvantages of both techniques. Ten cadaveric specimens were prepared for surgical simulation. After a standard [pterional craniotomy](#), the [anterior clinoid process](#) (ACP) was resected in 2 steps. The segment anterior to the OS was resected extradurally, while the segment posterior to the OS was resected [intradurally](#). The proposed technique was performed in 6 clinical cases to evaluate its safety and efficiency. Anterior [clinoidectomy](#) was successfully performed in all [cadaveric specimens](#) and all 6 patients by using the proposed technique. The extradural phase enabled early decompression of the [optic nerve](#) while avoiding the adjacent [internal carotid artery](#). The OS was drilled intradurally under direct visualization of the adjacent neurovascular structures. The described [landmarks](#) were easily identifiable and applicable in the surgically treated patients. No operative [complication](#) was encountered. A proposed 2-step hybrid technique combines the advantages of the extradural and intradural techniques while avoiding their [disadvantages](#). This technique allows reduced intradural drilling and subarachnoid [bone dust](#) deposition. Moreover, the most critical part of the [clinoidectomy](#)-that is, [drilling](#) of the OS and removal of the body of the ACP-is left for the intradural phase, when critical [neurovascular](#) structures can be directly viewed ¹⁾.

¹⁾

Tayebi Meybodi A, Lawton MT, Yousef S, Guo X, González Sánchez JJ, Tabani H, García S, Burkhardt JK, Benet A. Anterior clinoidectomy using an extradural and intradural 2-step hybrid technique. J Neurosurg. 2018 Feb 23;1-10. doi: 10.3171/2017.8.JNS171522. [Epub ahead of print] PubMed PMID: 29473783.

From:

<https://neurosurgerywiki.com/wiki/> - **Neurosurgery Wiki**

Permanent link:

https://neurosurgerywiki.com/wiki/doku.php?id=bone_dust

Last update: **2024/06/07 02:58**

