

Orbitomeningeal Band in Transcavernous Dissection and Anterior Clinoidectomy: 3-Dimensional Operative Video

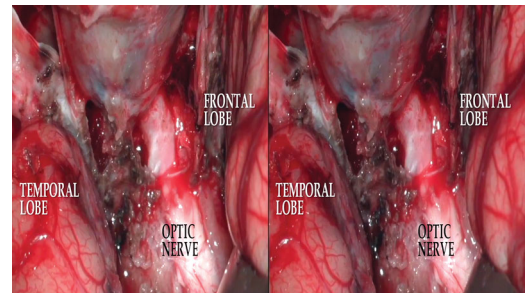
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The orbitomeningeal or meningo-orbital band (MOB) has been described as the most superficial dural band responsible for tethering the frontotemporal basal dura to the periorbital.^{1,2} The MBO usually interferes with the surgical approach to the most profound areas of the anterior and middle skull base. It is known that there are no cranial nerves on the lateral surface of the superior orbital fissure; therefore, the neurosurgeon can cut the MOB without causing any neurological deficit and, at the same time, achieving fully exposure of the anterior clinoid process¹⁻⁴ and/or the lateral wall of the cavernous sinus.⁵

The purpose of this video is to describe the microsurgical anatomy of the MOB and illustrate the technique for its detachment, accompanied by 2 illustrative cases. To achieve this, we use 3-dimensional recordings of 2

cadaveric specimens' dissections performed by the senior author.

Case 1: 58-yr-old female with left blindness. Magnetic resonance imaging (MRI) shows an anterior and middle skull base lesion with orbital compression.

Case 2: 32-yr-old male presenting with headache and trigeminal neuralgia. The MRI revealed an hourglass-shaped lesion in the posterior and middle fossa. Both patients signed an informed consent and agree with the use of their images for research purposes.

We used a step-by-step approach for an adequate and secure dissection of the MOB highlighting the anatomic structures involved in the process. This approach allows safe and adequate access to the deeper structures of the anterior and middle skull base.

KEY WORDS: Meningo-orbital band, Anterior clinoidectomy, Cavernous sinus dissection, Microsurgery

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Disclosures

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