Foramen magnum meningioma

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Foramen magnum meningiomas (FMMs) are slow growing, posterior fossa meningiomas most often intradural and extramedullar. They are those arising anteriorly from the inferior third of the clivus to the superior edge of the C2 body, laterally from the jugular tubercle to the C2 laminae, and posteriorly from the anterior border of the occipital squama to the spinous process of C2 [1) 2) 3)].

Epidemiology

They represent 2% of all meningiomas [4)].

The mean age of the patients with these lesions at the time of diagnosis is approximately 55 years old, but these tumors have been reported in patients of almost every age [5) 6) 7) 8) 9)].

Classification

Foramen magnum meningioma classification.

Pathology

They have traditionally been said to involve the lower third of the clivus and the C1 C2 area. However, the last categorizations are arbitrary.

There are some tumors that involve the entire clivus, and others that involve the mid and lower third of the clivus. (The upper clivus is the area above the trigeminal root, the mid-clivus extends to the level of the glossopharyngeal nerve, and the lower clivus is the region below the glossopharyngeal nerve).

Clinical Features

The indolent clinical course of FMMs and their insidious onset of symptoms are important factors that contribute to delayed diagnosis and relative large size at the time of presentation. Symptoms are often produced by compression of surrounding structures (such as the medulla oblongata, upper cervical spinal cord, lower cranial nerves, and vertebral artery) within a critically confined space

Diagnosis

Foramen magnum meningioma diagnosis.

Differential Diagnosis

see Foramen Magnum Tuberculoma

IgG4-related hypertrophic pachymeningitis [10].

Primary Meningeal Melanocytoma [11]

Treatment

Foramen magnum meningioma treatment.

Complications

Foramen magnum meningioma surgery complications

Case series

Foramen magnum meningioma case series

Case reports

Foramen magnum meningioma case reports.

Videos

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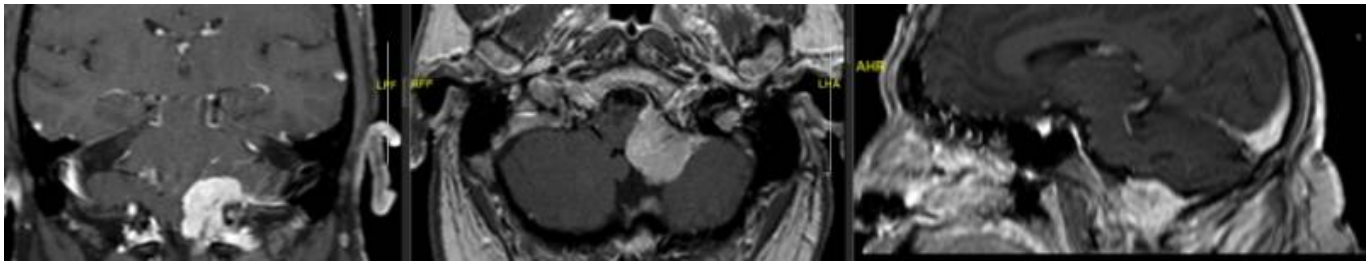
Campero A, Baldoncini M, Villalonga JF, Paíz M, Giotta Lucifero A, Luzzi S. Transcondylar Fossa Approach for Resection of Anterolateral Foramen Magnum Meningioma: 2-Dimensional Operative Video. World Neurosurg. 2021 Oct;154:91-92. doi: 10.1016/j.wneu.2021.07.058. Epub 2021 Jul 21. PMID: 34303002.

Foramen magnum meningioma General University Hospital of Alicante Cases

A 57-year-old male patient debuted with symptoms of syncope in relation to choking in recent months. He also refers to episodes of contracture of the pharynx and tongue.

Extra-axial mass centered on the left side of the foramen magnum with a size of 2.6 x 2.1 x 3 cm (AP

x T x CC) showing isointense behavior on T1 and T2 sequences, with restricted diffusion and homogeneous enhancement after contrast administration, with an associated dural tail. It exerts a mass effect on the proximal cervical spinal cord, displacing it anterolaterally to the left and deforming it, as well as on the medulla oblongata, left cerebellar tonsils, and left cerebellar hemisphere. Said mass contacts approximately 50% of the circumference of the proximal portion of the intradural segment of the left vertebral artery (V4), without reducing its caliber. As a relevant anatomical variant, the right vertebral artery ends in PICA, being the dominant left vertebral artery, from which the basilar artery is formed. It contacts the lower slope of the canal of the left hypoglossal nerve, in which it seems to enter slightly. The left hypoglossal nerve cannot be identified. The dural thickening/tail of the tumor contacts the posterior slope of the left posterior tear, without extension to it. The lesion does not seem to have contact with the cisternal course of the left glossopharyngeal nerve and vagus nerves, leaving these in a more cranial position to the tumor. Arachnoid cyst in the right anterior temporal pole of about 11 mm x 23 mm.



He developed a cerebrospinal fluid leak, treated with External lumbar cerebrospinal fluid drainage, Wound revision-Closure, Tachosil apposition and dural suture.

External lumbar cerebrospinal fluid drainage occlusion

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