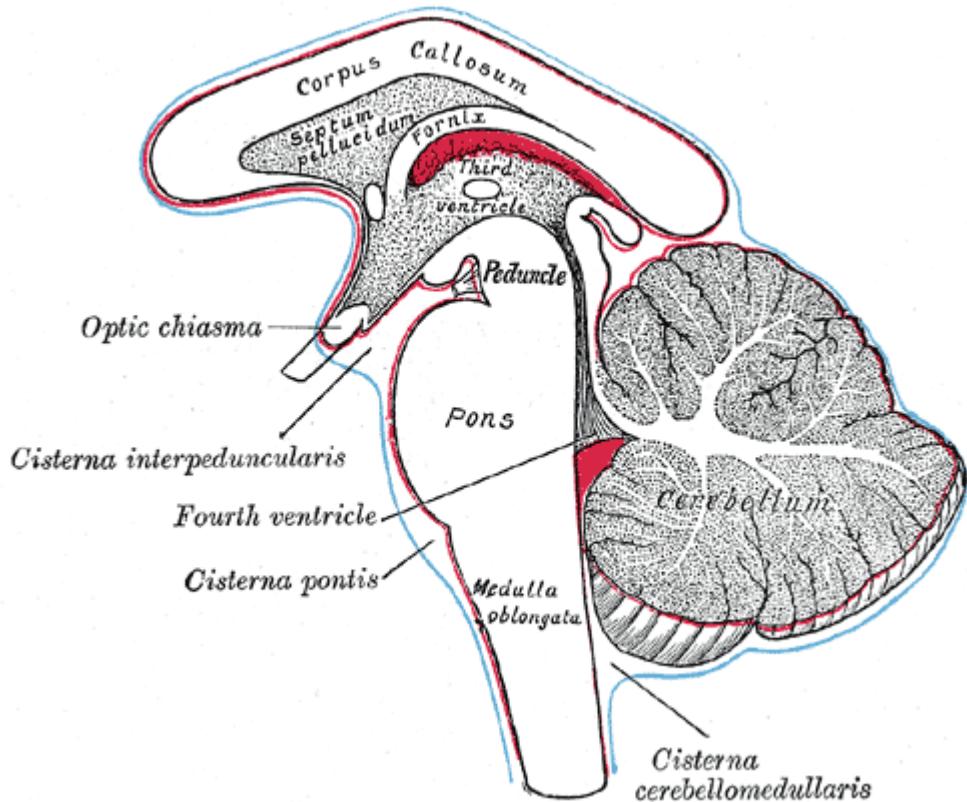


Cisterna magna

The largest of the subarachnoid [cisterns](#).



The two other principal cisterns are the [pontine cistern](#) located between the pons and the medulla, and the [interpeduncular cistern](#) located between the cerebral peduncles.

The cisterna magna (or cerebellomedullary cistern) is one of three principal openings in the [subarachnoid space](#) between the [arachnoid](#) and [pia mater](#) layers of the [meninges](#) surrounding the brain. The openings are collectively referred to as cisterns. The cisterna magna is located between the cerebellum and the dorsal surface of the [medulla oblongata](#). Cerebrospinal fluid produced in the [fourth ventricle](#) drains into the [cisterna magna](#) via the [lateral apertures](#) and [median aperture](#).

It receives CSF from the [fourth ventricle](#) via the median [foramen of Magendie](#) and the paired lateral [foramen of Luschka](#).

Content

The [vertebral artery](#) and the origin of the [posterior inferior cerebellar artery \(PICA\)](#).

The ninth (IX), tenth (X), eleventh (XI) and twelfth (XII) [cranial nerves](#).

The [choroid plexus](#).

Cerebral spinal fluid can also be obtained by puncture of the cisterna magna (cistern puncture).

Combined unilateral trans [cerebellomedullary fissure](#) (CMF), /lateral foramen magnum approaches provide a wide and close surgical field in the [cerebellomedullary cistern](#) (CMC), allowing easy and safe

CMC surgery ¹⁾.

Giant cisterna magna



Panventriculomegaly with a wide [foramen of Magendie](#) and a large [cisterna magna](#) may belong to a subtype of [congenital hydrocephalus](#) with familial accumulation, younger age at onset, and symptoms of normal pressure hydrocephalus. In addition, a family with PaVM has a gene mutation associated with dysfunction of motile cilia ²⁾.

Cisterna magna meningioma

see [Cisterna magna meningioma](#).

¹⁾

Matsushima T, Kawashima M, Inoue K, Matsushima K, Miki K. Exposure of Wide Cerebellomedullary Cisterns for Vascular Lesion Surgeries in Cerebellomedullary Cisterns: Opening of Unilateral Cerebellomedullary Fissures Combined with Lateral Foramen Magnum Approach. World Neurosurg. 2014 Apr 30; pii: S1878-8750(14)00447-1. doi: 10.1016/j.wneu.2014.04.064. [Epub ahead of print] Review. PubMed PMID: 24793562.

²⁾

Kageyama H, Miyajima M, Ogino I, Nakajima M, Shimoji K, Fukai R, Miyake N, Nishiyama K, Matsumoto N, Arai H. Panventriculomegaly with a wide foramen of Magendie and large cisterna magna. J Neurosurg. 2016 Jun;124(6):1858-66. doi: 10.3171/2015.6.JNS15162. Epub 2015 Dec 4. PubMed PMID: 26636390.

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