## **Posterior fossa arachnoiditis treatment**

The purpose of operative treatment of posterior fossa arachnoiditis is to relieve the obstruction of the cerebrospinal fluid circulation and improve the cerebrospinal fluid absorption and to direct the excessive CSF into suitable channels and decrease the intracranial pressure.

Surgical de-tethering has favorable results with progressive collapse of the syrinx and relief of the associated symptoms.

Usually, the superior wall, the posterior wall and the lateral walls of the cyst can be clearly seen in the operative field.

But where the inferior wall near the cervical spine ends has not been described previously, or whether the cyst communicates with the ventricular system or the subarachnoid space or both. For this reason, three cases were studied at operation. In these, a preoperative diagnosis of a spaceoccupying lesion in the posterior fossa was made by ventriculography and an arachnoid cyst of the cerebellomedullary cistern, which respectively measured 3 x 3 x 4 cm, 3 x 4 x 2 cm and 4 x 4 x 2 cm was found at operation. The superficial arachnoid of the cyst was thickened and without luster or transparency. There was no adhesion between the arachnoid and the dura mater. The cyst wall was carefully protected from rupture. When 10 ml of dilute methylene blue solution was injected into the lateral ventricle via a Scott cannula, the blue solution rapidly passed into the cyst. Next, a lumbar puncture was carried out. The lumbar CSF respectively showed a blue color 2 minutes, 5 minutes and 6 minutes later. Before the three operations they examined in one case the CSF obtained from the lateral ventricle, the "cyst" and the spinal subarachnoid space. The three specimens all had normal protein, sugar and chloride and cellular content. Thus it can be seen that the so-called "arachnoid cyst of the cerebellomedullary cistern" seen at operation is only a continuation of the arachnoid elsewhere. Its inferior boundary extended farther into the spinal canal rather than only to the inferior side of the cerebellomedullary cistern. It is clear that the superior boundary communicates with the fourth ventricle and could not obstruct the ventricular system. Therefore, the term "arachnoid cyst of the cerebellomedullary cistern" gives a false impression.

Adhesive obstructive arachnoiditis of the cerebellomedullary cistern was treated by posterior fossa decompression. The thickened arachnoid in the cerebellomedullary cistern, which was usually like a cyst wall, was removed or dissected as much as possible. Postoperatively, the majority of patients were treated by corticosteroids, usually with combined traditional Chinese and Western medicine. If the patients' symptoms postoperatively had not improved, or if they recurred after improvement, various methods of guiding the CSF through a catheter to the auricle, the peritoneum or from the spinal subarachnoid space to the retroperitoneal tissue were used.

In this series, there was adhesion recurrence in eight cases. Five of them had a ventriculoperitoneal shunt through a silicone catheter instead of the Holter valve. Postoperatively four cases recovered and were discharged; one died from pneumonia in hospital. The four cases, followed up from seven months to three years, were all able to perform the tasks of daily living and work. The remaining three cases who refused to accept the shunt procedure all died from recurrent intracranial hypertension. (2) Obstruction of the foramen of Magendie: if the foramen had a membranous adhesion that could be dissected easily, it was removed carefully. When the adhesion was too severe to dis-sect, splitting the

Last update: 2024/06/07 posterior\_fossa\_arachnoiditis\_treatment https://neurosurgerywiki.com/wiki/doku.php?id=posterior\_fossa\_arachnoiditis\_treatment 02:51

vermis was thought to be justified as a proper measure without damage to the medulla oblongata. It is to be noted that the laminae of the cervical vertebrae at the level of the herniation of the tonsils, was removed; the dura and arachnoid above the herniated tonsils were opened sufficiently to relieve compression of the brain stem. (3) Cerebellopontine angle arachnoiditis: if an arachnoid cyst had formed, the cyst wall was removed as much as possible and the adhesions around the cranial nerves dissected carefully. Usually, the results in these cases were satisfactory <sup>1)</sup>.

1)

Rongxun Z. Chronic arachnoiditis in the posterior fossa: a study of 82 cases. J Neurol Neurosurg Psychiatry. 1982 Jul;45(7):598-602. PubMed PMID: 6981688; PubMed Central PMCID: PMC491474.

From: https://neurosurgerywiki.com/wiki/ - **Neurosurgery Wiki** 

Permanent link: https://neurosurgerywiki.com/wiki/doku.php?id=posterior\_fossa\_arachnoiditis\_treatmen



Last update: 2024/06/07 02:51