

Surgical Treatment of Colloid Cysts

The majority of colloid cysts are situated in the vicinity of the third ventricle of the brain. The third ventricle is in the centre of the brain and allows passage of cerebrospinal fluid (CSF) to flow from the brain down around the spinal cord. Blockage of the CSF flow may result in hydrocephalus which assists in the surgical approach to this brain cyst.

OPERATION

There are 2 types of operations that may be performed to remove the colloid cyst.

Endoscopic removal of colloid cyst

This approach utilises the fact that there is often hydrocephalus associated with the colloid cyst. Two small incisions are made 2 cms off the midline on the left and right. Small burrholes are created and an endoscope (small telescopic camera) is inserted through the brain tissue into the ventricle. This is connected up to a video monitor allowing direct visualisation of the colloid cyst. A second port is inserted through the second burrhole allowing the passage of instruments into the ventricle. The colloid cyst is then removed in its entirety and the instruments and endoscope carefully removed. The small incisions are then closed with staples or stitches.

Craniotomy & excision of colloid cyst

An incision will be made in the midline at the top of the head after a general anaesthetic has been administered. The neurosurgeon will then raise a small piece of bone (craniotomy) and, using the microscope, carefully separate the two hemispheres of the brain. The hemispheres are connected lower down by a structure called the corpus callosum, and the front few centimetres of this structure immediately overlies the third ventricle. As such, a small incision is made in the corpus callosum allowing identification of the colloid cyst. The cyst is then removed in its entirety. The bone is then replaced and secured with some titanium plates and the incision closed with staples or stitches.

Your surgeon will discuss the surgical approach with you prior to surgery. Occasionally chronic hydrocephalus will be present from the colloid cyst so that despite removal of the cyst, symptoms of raised intracranial pressure (headaches, nausea/vomiting) persist. In these cases a V/P shunt may need to be inserted to treat the hydrocephalus.

Risks of the procedures:

- Infection – superficial wound infection or deeper infections including meningitis, osteomyelitis.
- Bleeding – which may be superficial or deep causing intracerebral haematoma and stroke-like symptoms.
- Weakness, numbness, speech disturbance or paralysis (stroke like symptoms).

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- Memory dysfunction.
- Hydrocephalus – which may be temporary or permanent and may require a second operation.
- Epilepsy which may require medication.
- Coma.
- Death (rare).