



## Surgical Treatment of Arachnoid Cyst

There are several ways to surgically treat arachnoid cysts. The aim of surgery is to release the cyst and localised pressure on the surrounding brain and structures and to reconstitute normal CSF flow.

### OPERATION

#### Marsupialisation of Arachnoid Cyst

The patient will be given a general anaesthetic and an incision made overlying the region of the arachnoid cyst. A craniotomy is then performed to expose the arachnoid cyst. Once this is done the cyst is incised under direct vision. The walls of the cyst are removed where possible and laid open to allow free flow of cyst fluid with the surround CSF. The bone is then replaced and secured with titanium plates. The skin is then closed with staples or stitches.

#### Fenestration of Arachnoid Cyst.

If it is not possible to fully lay open the arachnoid cyst wall, the wall may be fenestrated to allow communication of the cystic cavity with the surrounding CSF. This is often done in the deep cisterns of the CSF spaces of the brain. An endoscopic approach may be taken rather than a craniotomy for this approach.

#### Shunting of Arachnoid Cyst

For recurrent arachnoid cysts a cysto-peritoneal shunt may be require to definitively treat the cyst. This allows flow of cyst fluid from the cyst into the abdominal cavity, thereby relieving decompressing the cyst and relieving pressure on the surrounding structures.

Surgical treatment of arachnoid cysts are generally well tolerated. Occasionally a second operation may be required, particularly if there is scarring at the previous operation site resulting in reformation of the cyst.

#### *Risks of the procedures:*

The risks of the operations include the following. A detailed discussion with your surgeon is recommended prior to surgery.

- Infection: Superficial infections may cause reddening of the skin. Occasionally stitch abscesses may occur, these may require antibiotics. Deeper infections may involve the bone - resulting in osteomyelitis, or the brain – resulting in an abscess, or the fluid around the brain - resulting in meningitis.
- Bleeding: which may occur either on the surface of the brain or within the brain which may result in brain damage, this may be temporary or permanent.
- Stroke or stroke-like complications including weakness in the face, arms and/or legs – this may be temporary or permanent.
- Loss of vision or double vision which may be temporary or permanent.
- Loss of smell or cerebrospinal fluid leak through the nose if a frontal approach is required.
- Epilepsy which may require medication. This may be temporary or permanent.
- Coma or death (very rare).