ELBOURNE NEUROSURGERY

INFORMATION LEAFLET

ARACHNOID CYST



www.neurosurgery.com.au

WHAT IS AN ARACHNOID CYST?

The Brain is covered with membrane that is called ARACHNOID (called this because it looks like the web of a spider). In between these layers there is fluid that bathes the brain called cerebrospinal fluid(C.S.F.). This membrane either duplicates or splits to form a fluid filled space called an Arachnoid Cyst.

HOW DO THEY FORM?

They are developmental (they are the result of changes that occur while the baby forms in the womb).

IN WHAT PARTS OF THE BRAIN DO THEY OCCUR?

The commonest location is in the area called the sylvian fissure (as shown in the picture and Xray) Otherwise they usually occur on the surface of the brain or where the brain splits.

HOW DO THEY AFFECT YOU?

This depends on which part of the brain they involve. They commonly cause no problems at all and may be found on a CAT scan or MRI scan done for other reasons.

If they become large in size they may push on the surrounding structures and prevent them working. This may produce stroke like symptoms.

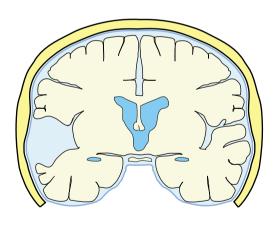
Sometimes they cause headache.

Rarely they may be the cause of fitting (seizures).

If a blood vessel crosses the cyst this may bleed and cause collapse. A small injury to the brain may cause this and at other times it may be spontaneous.



Cat scan of Brain showing Right Sylvian Arachnoid cyst (dark area on left of picture)



Section of brain showing Right Sylvian Arachnoid cyst (blue area on left of picture)

HOW IS THIS DIAGNOSED?

CAT SCAN

This is usually the first test. This is a computerised X-ray of your brain and this shows the fluid as a dark area.(see pic)

M.R.I. (Magnetic Resonance Imaging)

This is the next test. It produces pictures like the CAT scan but they are generated using a magnetic field and not using radiation. This test is not always needed if the CAT scan shows the problem. This may be used to confirm that the abnormality on the CAT scan is an arachnoid cyst because it sometimes can be confused for other types of lesions.

What happens when an arachnoid cyst is diagnosed?

You are referred to a specialist after the CAT scan in most cases and they organise any further investigations. The common specialists to be referred to are:

Neurosurgeons Neurologists

In most cases nothing further will be done. If you are having symptoms that are related to the arachnoid cyst then it may need to be treated with surgery.

If I require surgery what will it be?

There are two types of operation that will be suggested. The surgeon usually decides which is required. This will depend on many factors. The aim is to drain the cyst or to connect it to something it can drain into.

It can either be connected to the fluid cavities around the base of the brain(usually the first thing tried) or drained to the lining around the bowel in the abdomen(this is called a shunt).

The initial procedure is called a craniotomy and internal drainage. This involves the removal of a piece of bone from the skull to allow access to the cyst. Using a microscope a small hole is placed in the deep part of the cyst to allow the fluid from around the brain to wash in and out. This takes the pressure off and usually the cyst will shink in size. Sometimes the cyst will not reduce much and this is because the cyst has been present for a long time.

If the above does not work then the cyst may have a catheter inserted between it and the fluid in the rest of the brain or down to the abdomen under the skin. (called a "SHUNT")

IS SURGERY ALWAYS NEEDED?

NO Mostly the cysts are observed but if they are causing symptoms surgery is usually recommended.

Can the Arachnoid Cyst get bigger?

YES If it does grow it is usually at a small rate. The concern may be in very large cysts that they may block the normal flow of CSF around or through the brain. Irf this is felt to be the case surgery may be offered to prevent the cyst causing any problems in the future.

Are Arachnoid cysts inherited?

Not as far as we know at this time.

Are Arachnoid cysts a type of tumour?

No They are formed from normal body tissue.

If I have a cyst diagnosed do I need regular CT scans to check on it?

Sometimes this may be recommended, particularly if the cyst had been felt to be the cause of some symptoms and surgery was not felt to be needed immediately.

If the cyst had been found accidentally and we felt that it was unlikely to cause any problems then we would follow you up based only on the development of new symptoms.



545 ROYAL PARADE PARKVILLE VIC 3052

PHONE 03 9816 - 9844 FACSIMILE 03 9816 - 9877

MELBOURNE NEUROSURGERY PTY LTD ACN 082 289 316

Disclaimer. This brochure is to provide general information and does not replace a consultation with your doctor.

© This brochure is copyright. No part of it may be reproduced in any form without prior permission from the publishers.