

Meningioma

Introduction

This page contains information about a type of brain tumour called a meningioma. This information will provide a basis for your discussions with your doctors and nurses.

Meningioma

Meningiomas arise from the leather-like layer of tissue covering the brain and spinal cord, called the meninges. Meningiomas can occur in any part of the brain or spinal cord but are usually sited on the inside of the skull. These tumours are usually benign (i.e. non-cancerous) and slow growing. They can grow quite large before they cause symptoms.

Symptoms

The symptoms are often due to increased pressure caused by the growing tumour, and often the first sign is a headache. Some people will feel nauseated and vomit. Others may have visual disturbances and some people will have seizures.

The symptoms will vary depending on the size and location of the tumour and may well be different in different people. Some people may experience all, some or none of the symptoms.

If you have a meningioma of the spinal cord you may experience pain, loss of sensation or weakness of the arms and legs. Some people may have problems with walking and some may have loss of bowel or bladder control.

Diagnosis

To come to a diagnosis the doctor will give you a neurological examination to assess the effect of your tumour on your nervous system. Then a **CT scan** or a **MRI scan** will be performed. The scan will show the exact position of the tumour. Other special x-rays may be performed, if the tumour involves the bone, skull x-rays may be taken. If the meningioma is in the spinal canal a **spinal MRI scan** may be done. Not infrequently an **angiogram** is performed. Sometimes an EEG test will also be done.

CT Brain scan (Computed Tomography) is a specialised x-ray. It will take 20-30 minutes and an injection, into the back of your hand, of a dye may be necessary to give the clearest picture of the tumour.

MRI Brain scan (Magnetic Resonance Imaging) is a specialised imaging technique that gives very clear pictures of the brain and will show the site and extent of the tumour. It usually takes 30-40 minutes and uses magnetism instead of x-rays. People with pacemakers cannot have this test and those with any other metallic implant should inform the doctor well before the test.

Angiogram is a special X-ray that shows up the blood vessels in the brain. This takes about an hour and involves a special injection of a dye.

Spinal MRI is another special scan of the spinal cord. It takes about 20-30 minutes and again may involve a small injection in the back of the hand. EEG (Electroencephalogram) is a test that measures the electrical activity coming from the brain. It does not give pictures but instead tells a little about how the brain is functioning and it is useful in confirming seizures, if there is a clinical suspicion of epilepsy.

The treatment of Meningioma

Your doctor will plan your treatment taking into consideration your general health and the size and position of the tumour. In other words the treatment is planned for each individual.

Surgery

The first treatment choice for meningeal tumours is surgery. Most can be operated on without a high risk of causing severe neurological damage.

Radiotherapy

This is the use of high energy x-rays to destroy tumour cells. Radiotherapy may be used when the meningioma is not completely removed by the surgery or can't be operated on safely because of the site of the meningioma. It can also be used to treat tumours that recur after surgery.

Radiotherapy is usually given as a course of treatments called 'fractions'. This usually means 20-30 treatments, once daily, over a few weeks. For further information see the Radiotherapy for Brain Tumours page. Stereotactic radiotherapy is being studied as a first treatment instead of surgery. This is a specialised form of x-ray treatment that uses narrow beams of high energy x-rays aimed at a small part of the head and is probably most useful for small tumours (<3 cm).

Steroids may be given to reduce any swelling around the tumour. Anticonvulsant medications can be used to control seizures. Refer to the Brain Tumours and Epilepsy page for further information.

Recurrence

Most meningiomas are benign and can be treated successfully with surgery. However sometimes the tumours regrow even when the tumour was thought to be totally removed. Treatment may be surgery again or radiotherapy. There may also be some new treatments available and you should discuss this with your doctor.

Even recurrent meningioma may not cause trouble and grow so slowly as not to interfere with life.