

Diagnosing Brain Tumours

A Quick Guide

Contents

This is a brief summary of the information on 'Diagnosing brain tumours' from our website. You will find more detailed information on there. In this information there are sections on

- Tests for brain tumours
- Further tests for brain tumours
- What to ask your doctor about diagnosing brain tumours

You can view this information in a larger print on our website.

Tests for brain tumours

Some people begin by seeing their GP if they have had symptoms for a while such as headaches that are getting worse. Your doctor will examine you and ask you about your symptoms and general health. They will ask you to have a physical examination, including a test of your nervous system (a neurological examination).

A neurological examination includes looking into your eyes, testing your reflexes, testing your senses and coordination, and asking simple questions to test your memory.

Some people have symptoms that come on quite suddenly such as a severe headache and drowsiness or a fit (seizure). In this case you would normally be taken to an Accident and Emergency department. There you will have a physical and neurological examination.

If your GP or the Accident and Emergency department doctor think that your symptoms could possibly be caused by a brain tumour they will refer you to a brain tumour specialist in a hospital.

At the hospital

Your specialist or a specialist nurse will repeat the physical and neurological examination. You will have blood tests to check your general health. You may also have a brain CT scan or an MRI scan of the brain. Before these scans you usually have an injection of dye called contrast medium. This circulates in the bloodstream to your brain and makes the pictures of the brain clearer.

Your specialist may also need to examine your breasts, tummy (abdomen), skin or back passage (rectum). This is to make sure there are no obvious signs of a cancer elsewhere in your body that could have spread to the brain.

Further tests for brain tumours

If you have been diagnosed with a brain tumour, you may need further scans or tests. These find out more about the tumour, including exactly where it is and how big it is, to help your doctor decide on the best treatment. You may have the following scans

MRI scans

MRI scans create pictures of body structures using magnetic fields and give clear pictures of the brain and spinal cord. An MRI scan called magnetic resonance angiography (MRA) shows the blood vessels in the brain. Magnetic resonance spectroscopy scans (MRS) look at chemicals in the tumour. 'functional MRI' (fMRI) takes the scan while you do things like move your hand, speak or read.

PET scan

PET scans show up the rate of activity of body tissues. You have a small amount of radioactive glucose as an injection. The scan measures how quickly the brain uses the glucose in different areas. It can help to show if a brain tumour is non cancerous (benign) or cancerous (malignant).

SPECT scan

SPECT scans get information about chemicals in the brain tumour. You have an injection of a very small amount of a radioactive chemical, which circulates in your blood to your brain and shows up the brain tumour on the scanner.

Other tests include

- Surgical biopsy – taking a small sample of the tumour to examine under a microscope
- CT scan of the chest and abdomen – checking whether cancer is anywhere else in the body
- Angiogram – looking at the blood circulation in the brain
- Myelogram – using a dye and X-rays to show fluid circulation around the spinal cord
- Lumbar puncture – taking a sample of cerebrospinal fluid for testing
- Neuroendoscopy – under general anaesthetic, drilling a hole in the skull and into the fluid filled spaces in the brain (the ventricles) to relieve pressure or take a biopsy or fluid sample

After your tests

You will probably feel anxious while waiting for your test results. It may help to talk to a friend or relative about your feelings. Or you may want to contact a support group to talk to someone who has been through a similar experience.

What to ask your doctor about tests for brain tumours

Some questions you might ask your doctor

- What tests will I have?
- What are you looking for?
- Will the tests show whether I have a brain tumour?
- Will the tests show if the brain tumour is benign or malignant?
- Will the tests show whether my brain tumour can be removed?
- Are any of the tests painful?
- Do any of the tests have after effects?
- Can I have these tests as an outpatient?
- Should I bring someone with me when I have the tests?
- How long will the results take?
- Who will give me the test results?
- Will you need to discuss the results with other specialists to help decide the best treatment for me?

Notes

For more information, visit our website <http://www.cruk.org/cancerhelp>

You will find a wide range of detailed, up to date information for people affected by cancer, including a clinical trials database that you can search for trials in the UK. Our information is based on the best current scientific evidence and reviewed regularly by leading clinicians and experts in health and social care.

For answers to your questions about cancer call our Cancer Information Nurses on 0808 800 4040 9am till 5pm Monday to Friday.

Adapted from Cancer Research UK's Patient Information Website CancerHelp UK in January 2014. CancerHelp UK is not designed to provide medical advice or professional services and is intended to be for educational use only. The information provided through CancerHelp UK and our nurse team is not a substitute for professional care and should not be used for diagnosing or treating a health problem or disease. If you have, or suspect you may have, a health problem you should consult your doctor. Copyright Cancer Research UK 2014. Cancer Research UK is a registered charity in England and Wales (1089464), Scotland (SC041666) and in the Isle of Man (1103)