WHAT IS A BRAIN BIOPSY?
This is where a small needle is passed into the brain (via a Burrhole) down to a suspicious lesion and the specimen is sent to the pathologist to find out what it is.

WHAT IS STEREOTACTIC?
This is where we attach a frame to the head so that with the aid of special imaging we can with pinpoint accuracy locate the exact position and size of the abnormal area in the brain.

WHAT IS A BURR HOLE
A burr hole is a small hole in the skull that is made with a burr.

WHAT ARE THE REASONS FOR A BIOPSY?
A lesion has probably been found on either a CT scan or a MRI scan. To treat it we need to know exactly what it is. The best way to do this is to send a piece to the pathologist. By using the frame we can accurately and safely pass a needle to the lesion.

HOW LONG WILL YOU BE IN HOSPITAL?
Usually for about 2-3 days depending on how well you are and what the pathology shows. We will need any X-rays that you have.

WHAT YOU NEED TO TELL THE DOCTOR BEFORE SURGERY?
If you have clotting problems.
Any Health problems.
If you are taking blood thinning agents, e.g. Warfarin/ aspirin/ anti-inflammatory
Drug or other allergies.

HOW IS IT PERFORMED?
Under local anaesthetic we attach a lightweight metal frame to your head. The local stings initially when injected into the scalp. After the scalp goes numb the frame is then screwed into the skull with four metal pins. This causes a headache which settles in 5-10 minutes.

You will then have the test to localise the lesion. This may be an angiogram for a vascular lesion or a CAT scan if it is a tumour. Sometimes for a vascular lesion we will use the CAT scan and your MRI scan to work out the specifics of the treatment.

You will be given intravenous contrast prior to the CAT scan. You are then taken to the operating theatre.
Your head will be fixed to the operating table. The area of the incision is then shaved and prepared with anti-septic. Local anaesthetic is injected (this may sting a little) and then the skin is cut. The burrhole is drilled down to the dura (lining around the brain) which is then cut to allow the needle to get in.

The needle is passed down to the lesion. The needle has a hollow centre and we aspirate a small biopsy through this. The biopsy goes to the pathologist and we then remove the needle.

The scalp is then closed. We will keep asking you to move your hands and feet to check that everything is O.K.

The frame is then removed by unscrewing the pins that we have placed. Sometimes these may bleed in which case we then place a stitch in the skin around the pin site.

**WHAT HAPPENS NEXT?**

You will go to recovery and after about 1 hour you will be transferred to the ward. The nursing staff will be continually checking your pulse/blood pressure/limb strengths and level of alertness looking for any changes to indicate a complication.

During the first night on the ward you will be woken for these observations. You will have intramuscular and oral analgesia. Operations on the head do not often hurt much.

On the next day the drip in your arm will be removed. You may have a repeat scan of your head before going home. Gradually over the day you will be able to get around as normal depending on any preoperative defect.

When you are comfortable you will be able to go home. Usually you will get the result of the biopsy and further treatment will be planned prior to discharge. The sutures are usually removed about 5 - 10 days after the surgery.

**WHAT HAPPENS WHEN YOU GO HOME?**

You should be able to do all the things that you could before the surgery.

You cannot drive till told you are able by your neurosurgeon.

You will have a follow up appointment.

If you notice any problems contact your neurosurgeon.

**WHAT ARE THE RISKS?**

Discuss these and others with your surgeon

**THE COMMON RISKS ARE**

- Infection (treated with antibiotics)
- Failure to get a result because of the size of the lesion or the size of the biopsy being small.
- Post operative blood clot requiring drainage.
- The wrong result. This can happen because the tumour or lesion may not be the same all the way through, hence a small biopsy may not give the whole picture.
- Death or stroke (rare)
- Clot in the leg (can travel to the lungs [uncommon])
- Seizure
- Complication not related directly to the surgery e.g. Pneumonia
- Heart attack
- Urine infection

**WHAT YOU SHOULD NOTIFY YOUR DOCTOR OF AFTER SURGERY**

- Increasing Headache
- Fever
- Fitting
- Swelling or infection in the wound.
- Fluid leaking from the wound.
- Weakness or numbness
- Drowsiness

**IF THE BIOPSY IS NOT SUCCESSFUL CAN IT BE DONE AGAIN?**

YES But it is very unlikely not to get a result.

**HOW LONG TILL WE GET THE RESULT?**

Usually only a couple of days but if the pathologist is uncertain then he may send the biopsy away to another pathologist for a second opinion.

**YOU WILL BE ASKED TO SIGN A CONSENT FORM TO SAY THAT YOU UNDERSTAND THE RISKS. IF YOU ARE NOT-SURE ASK BEFORE YOU SIGN.**