

What is Stereotaxy ?

This is where external markers are used to identify locations inside the brain.

How is it done ?

There are Two Techniques

Frameless Stereotaxy

Prior to surgery you will have either a CT or MRI of your brain. This information is entered into a computer at the time of surgery. If you have had dots placed onto the outside of your head these are registered onto the computer prior to the commencement of surgery. If you have no dots your face and forehead is scanned with a laser that is picked up by a special computer sensor. With this done the computer can now locate in real time with the aid of a probe exactly where the surgeon is inside your head.

Framed Stereotaxy

You will have a frame fitted to your head and this is done with four steel pins under local anaesthetic. You will then have either a CT or MRI of your brain. This information is entered into a computer at the time of surgery. This will tell us the co-ordinates for the biopsy. These are entered into the frame and the probe is then passed to the location chosen.

How accurate is it ?

It can be down to a couple of millimetres.

Who uses it ?

All neurosurgeons would have it available today.

Is it always required ?

No. If you have already had surgery in that region your neurosurgeon will use the previous landmarks. He may still use it to locate the margins of the needed resection.

Does it always work. ?

No sometimes it may not be accurate. The surgeon always does a check of the accuracy prior to beginning the operation.

Is it just used in a craniotomy ?

No! It can be used to do a needle biopsy of a tumour or used to locate an abscess for needle drainage.