



# Stereotactic Radiosurgery

## What is Stereotactic Radiosurgery?

Stereotactic radiosurgery is a type of radiation treatment that uses Gamma rays. Gamma rays are different from the x-rays used in a standard x-ray in that they have a much shorter wavelength. These gamma rays are directed at the tumour in your eye. Because it is important that your head remains in the exact position needed to give this treatment people having Stereotactic radiosurgery have to wear a metal frame on their head, which allows us to ensure that the head does not move during surgery.



## How will this treatment help me?

The treatment aims to:

- Destroy the tumour in your eye
- Allow you to keep your eye
- Help save your sight (how much sight loss you get will depend on where your tumour is. Your Ophthalmologist will talk to you about this)

## What are the risks involved in this treatment?

Whenever radiation is used as a treatment there is always some risk. However, the staff operating the equipment are trained to calculate the smallest dose you need for effective treatment so that any risk is lessened as far as possible.

Occasionally, this treatment can have complications including:

- Corneal abrasion. This may make your eye feel irritable and watery and look red. The antibiotic ointment you will have been prescribed should help to relieve this. However, if it does not then please do not hesitate to contact us on the number given below.
- Some eyelash loss
- Blocked tear duct - watery eyes
- Irritable - foreign body sensation (may look red and sore, may also cause watering)
- Cataract
- Retinal detachment
- Vitreous haemorrhage (bleeding in the jelly like substance in the eye). This usually resolves without treatment. However, we sometimes have to treat this condition with laser treatment.
- Glaucoma - raised pressure in the eye. Can usually be treated with eye drops or laser. However, if it does not get better we may have to consider surgery.

You will have a chance to talk to the ophthalmologist about these risks before you begin treatment. However, if you would like to discuss them sooner or have any concerns then please contact your support sister.

### **Will my eye be cut?**

No, although the Gamma rays are also known as the Gamma Knife and the treatment is called surgery we do not have to cut your eye or operate in the normal way.

### **Gamma Knife Machine**



### **Will the radiation affect the healthy parts of my eye?**

The Gamma Knife aims Gamma rays into a narrow beam. At the centre of the beam the radiation is very high. It is this that is aimed at the tumour. On the outside of the beam the radiation is very low this helps to lessen the risk of damage to the healthy parts of your eye.

## Do I have to stay in hospital?

Yes, you will be admitted to ward I1 at the Royal Hallamshire Hospital at 10am the day before treatment. However, you will have your treatment at Weston Park hospital.

## What happens before my treatment?

When you come into ward I1 a nurse will take your details and a medical history. You will also meet your ophthalmologist (a doctor specialising in eyes) and have a chance to ask any questions you have about your treatment. Once you are happy that you understand what is going to happen to you, you will be asked to sign a consent form.

Early on the day of treatment you will be offered a light early breakfast and then given some pre-operation medication that helps you to relax.

## Will I need an anaesthetic?

Yes, for this treatment your affected eye will be anaesthetised by a local anaesthetic. The anaesthetic is given by an injection into the skin around your eye. Once this has taken effect you will not feel any pain and your eye is less likely to move. To make sure that your eye stays completely still, the surgeon will put in some stitches around your eye that stops it moving

## What does the treatment involve?

- Then we will show you the frame you will need to wear and explain how it is fitted and used. We then get you ready to have the frame fitted, this procedure will take about 15 minutes.
- We measure the surface of your head so that we can be sure that we know exactly where your head is in relation to the frame. This is important because the Gamma rays need to be aimed precisely at the tumour in your eye.
- Next we take you for a MRI scan. This scan gives us pictures that help us to plan your treatment. The pictures are kept on a computer and they along with the other information we have about you are used to decide what dose you need for effective treatment. Whilst we are doing this, you will be taken to Weston Park Hospital and prepared for your treatment.
- You and the frame will now be fixed into the treatment machine and made as comfortable as possible on the moveable couch. The person who carries out the scan is called a radiographer. Your radiographer will explain what is going to happen and start the treatment when you are ready.
- The couch will be moved into the central body of the treatment unit in order to deliver the first field of radiation. You will be observed on camera from the control room at all times, but cannot stay with you. You will be able to talk to us and we will be able to talk to you.

## How long does the treatment take?

The treatment takes about 1½ hours. When it is completed, the frame will be removed and you will be taken to ward I1 at the Royal Hallamshire Hospital where a nurse will remove the stitches from your eye.

## How will I feel after the treatment?

Your eye may feel sore and will look red after the treatment. If the discomfort is enough for you to need painkillers we usually give paracetamol.

However, once the treatment is finished you should not have any of the usual side effects associated with radiation. For example, this treatment does not cause loss of hair or sickness.

## When will I be able to go home?

In most cases you will be discharged home the following day.

## What happens when I leave hospital?

- When you leave hospital, we will give you an antibiotic ointment that you will need to put into the affected eye 4 times a day. If you feel you need help to do this it may be possible to arrange for a district nurse to call.
- You will be reviewed in clinic approximately 6 weeks later.

## What if I need more information?

If you would like some more information, have any concerns about your treatment or are worried about your eye once you get home then please do not hesitate to call us on:

Support Sister (Key worker) Rhona Jacques

Tel: **0114 271 2029 or 0114 271 1900 and ask for bleep 026**

Support Sister (Key worker) Lesley Hinchliffe

Tel: **0114 271 2029 or 0114 226 1341 and ask for bleep 853**

Appointments Tel: **0114 271 2978**

If you need to speak to someone during the weekend because you are having problems with your eye please contact the Ophthalmologist on call either through:

The hospital switchboard                      Tel: **0114 271 1900** or

Ward I1    Tel: **0114 271 2504**

## Additional information

You may feel quite tired for a couple of months following treatment this is perfectly normal. However if you find you continue to struggle to return to your normal activities due to the impact of your treatment additional support may be helpful.

**Please contact your Support Sister (Key worker) if you require any information on support services and or complementary therapy services in your area.**

UK Support groups include:

One-Vision    Tel: **0845 108 3161**

Email : [onevis@nccnet.co.uk](mailto:onevis@nccnet.co.uk)

Website : <http://www.one-vision.org.uk>

An American website/ chat line is also available for people who have lost an eye or have lost vision in one eye. You can visit this on:

Website: <http://www.LostEye.com>

Further information about Stereotactic Radiosurgery in Sheffield can also be found on the internet: [www.shef.ac.uk/~ns](http://www.shef.ac.uk/~ns)

## Need financial advice?

If you are experiencing financial problems and not sure what benefits you are entitled to /or need help with travelling expenses you can get advice from:

Macmillan. Tel: **0800 808 0000**

Your local Social Security Office

Your local Citizens Advice Bureau

smoke-free  
hospitals

Sheffield Teaching  
Hospitals supports  
organ donation.



Do you?

[organdonation.nhs.uk](http://organdonation.nhs.uk)

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