Radiotherapy to the brain – short course
Information for patients
Introduction

This leaflet is for people who have been recommended treatment with a short course of radiotherapy to the brain.

The General Radiotherapy Leaflet will explain what having the treatment involves, common side effects and some general information about the department. This leaflet – Radiotherapy to the brain (short course) will provide more detail, specific to the type of treatment planned for you and how you can help yourself during and following treatment.

It is intended as a guide because the timing and effects of treatment may vary from one person to another. This leaflet will highlight the key points of the discussions you will have had with your doctor and treatment team. Family members and friends may also find it helpful.

What is radiotherapy treatment

Radiotherapy is a treatment used to treat brain tumours with radiation. The radiotherapy machines target the radiation at a specific area of tumour, destroying the cancer cells or slowing down their growth with the aim of causing as little damage as possible to the surrounding normal brain cells in the area.

The treatment is given in small doses called “fractions”. The number of fractions will depend as to which course of treatment you will be having. Your individual treatment will be based on your condition. Your consultant will discuss this with you in more detail.
Radiotherapy for symptom relief

Radiotherapy can be given to treat symptoms that are causing you problems. This can be used for brain tumours that started off in the brain or cancers that have spread to the brain. These symptoms are caused when the growth of the tumour presses on nerves and surrounding tissues. The treatment relieves this pressure by shrinking the tumour. It may be possible to control the growth of the cancer for a while with radiotherapy but not possible to get rid of it completely. This type of radiotherapy is called palliative treatment and you will have five to 10 treatments over one to two weeks. Each treatment will last for about 10 to 15 minutes. You will be able to go home after every treatment.

Radiotherapy to prevent recurrence of the cancer

Some patients with cancers such as lung cancer or leukaemia are offered radiotherapy to the brain to try and reduce the chance of the cancer affecting the brain in the future. This is called prophylactic cranial radiotherapy (PCI). You will normally have 10 to 12 daily treatments.

Radiotherapy planning

At planning appointment you will go to the “mould room”, where we make a plastic mask for you. The mask will keep your head still during the radiotherapy treatments so that the radiation is given to exactly the same area each time.

To make the mask the radiographer will warm the plastic until soft and then lay it on to your head, so that it shapes to your face exactly. It feels a little like having a warm towel put onto your skin. There are holes in the plastic so you can breathe comfortably. Once the plastic has cooled and hardened (which takes a few minutes) the radiographer takes it off. The mask is
then ready to be used. Any marks to guide the radiographers can be drawn on the mask, not on your skin.

**The mask**

You will then have a “planning CT scan”. The doctor looking after you will use the scan to outline the tumour and the surrounding brain, so that we can highlight the exact area to be treated.

**The planning CT scanner**
Treatment

You will lie on a couch in the same position you were in for the planning CT, lying on your back and wearing the mask. The radiographers will move the couch and the treatment machine into position. Your treatment will be specific to you and may not be like the treatment of a fellow patient. The treatment machine may come very close to you but it will not touch you.

The treatment machine

When you are in the correct position the radiographers will leave the room to start your treatment. The machine makes a buzzing noise when it is switched on. You have to lie still and breathe normally. The radiographers will be watching you on cameras from outside. If you want them to come back in just raise your hand. You will not see or feel anything during treatment.
Side effects

Radiotherapy treatment is painless. However, there are some side effects which are associated with radiotherapy and you may notice one or more of them gradually developing over the course of treatment.

Please note that it is rare for one patient to experience all of these side effects.

If anything is worrying you, however small, during your treatment, please tell your therapy radiographer or nurse practitioner, either at your visit or by phoning the department.

Tiredness

You may feel a build up of tiredness during your radiotherapy treatment and for a few weeks after the treatment has finished. This can often be made worse by having to travel to the hospital each day. Patients often notice that this tiredness worsens and is at its most severe at around six to eight weeks after finishing the treatment. Listen to your body and if necessary allow yourself extra time to rest.
Skin reaction
Most people develop a skin reaction in the area being treated. The area may become red, more dry, sensitive or begin to peel. Please refer to the Skin Care Sheet, which will tell you how to care for the skin in this area. It is usual for the skin reaction to begin two to three weeks after the beginning of a radiotherapy course. It will last for a small number of weeks after radiotherapy is complete. After treatment finishes continue your skin care regime until your skin has recovered. The redness and soreness will go away completely, but occasionally there may be some longer term skin changes that will be discussed with you if they are likely to be significant.

Your skin is very sensitive and needs protecting from the sun or cold winds, try wearing a hat or cotton scarf. The skin in the treated area will always be sensitive to the sun. Therefore it is best to use a high factor sun cream factor 25+ or sun block in the future. It is very important to cover the treated area if you go out in sunshine.

These restrictions apply to the treatment area only.

Hair loss
You will lose the hair within the area of the radiotherapy treatment. Ask your radiographer to show you exactly where your hair may fall out. The hair will begin to fall out three weeks after you start the treatment. The loss of hair maybe permanent or patchy and start to re grow four to five months after the treatment.

Wigs
Before your treatment begins the nurse practitioner will tell you how to obtain a wig including the recommended shops. There is a form to complete and unless you are exempt a prescription charge – payable at the General Cashiers Office at the hospital. They will complete the form which can then be taken to a hospital approved supplier. Our suppliers often provide a fitting
service so that the wig can be trimmed or brushed to the style you like. They will also tell you how best to look after your wig.

Wigs can feel tight and uncomfortable as your skin will be more sensitive during and perhaps after treatment. There are towelling turbans available or perhaps a light cotton or silk scarf or soft hat will feel more comfortable.

Your hairdresser maybe able to help you find a style which will cover any hair loss or patchy area.

Further information can be found in the Macmillan Leaflet Coping with Hair Loss.

**Headaches and nausea**
You may have already experienced **headaches, nausea, and changes to your vision or limb weakness**, controlled now by dexamethasone tablets (steroids). However the radiotherapy may cause some of these symptoms to return or become worse. This is because radiotherapy may cause some temporary swelling of the brain.

If you experience these side effects during treatment then please tell your radiographer. They may arrange for you to see a doctor to adjust the dose of dexamethasone which you have been prescribed.

**Seizures or fits**
You may have already been experiencing seizures or fits, which may be controlled now by an anti epileptic drug. However the radiotherapy may cause return or increased frequency of fits. This is because radiotherapy can cause some swelling of the brain as it works. Please continue to take your prescribed medication.

Usually a fit will last a few minutes and does not need emergency help. However,

- if it lasts more than five minutes without any sign of slowing down,
• is unusual in some way,
• the person has trouble breathing afterwards
• appears to be injured / in pain or
• recovery is different from usual,

then call for emergency help – dial 999

It maybe helpful to be able to tell the doctors what the person was doing just before the seizure began, what happened during the seizure, how long it lasted, and how quickly the person recovered afterwards.

Usually the side effects you have experienced may become worse for a short while and slowly settle. Please do not worry as this is quite normal. During this time you should continue to follow the advice you have been given during your treatment. Continue to take any prescribed medication for the side effects until advised by your doctor. If you are on dexamethasone sometimes its dose may need to be increased temporarily whilst you are on treatment.

Review during and after treatment

If you have any symptoms or concerns, please speak to one of the radiographers when you come for treatment and they will ask the medical or nursing staff to review you. If you are taking dexamethasone you should be given guidance about tailing down the dose slowly. Please ask if you are concerned.
After treatment

After your treatment has finished you will be asked to return to the Outpatient Clinic to be reviewed by your oncology consultant or his/her team. Radiotherapy takes time to work and so it is at this appointment your doctor will assess and discuss your progress and any continuing side effects with you and plan further appointments, needed in the future.

Driving

All drivers who have a brain tumour must contact the DVLA and inform them of their diagnosis. Patients are not permitted to drive a car for a minimum of two years (high grade primary and secondary brain tumours) from the time of their treatment. In addition, patients with epilepsy must not drive for a minimum of 12 months from their last seizure. Failure to comply with these regulations is illegal and potentially dangerous, insurance is invalid and can incur a fine of up to £1000.

The DVLA can be contacted at: DVLA, Swansea SA6 7JL. You can also notify the DVLA of your medical condition by phone: 0870 600 0301. Full details and advice are also available on the website at: www.dvla.gov.uk
How to contact us

If you have any queries during your radiotherapy please do not hesitate to ask a member of staff treating you during normal working hours or when you come for treatment or Oxford triage assessment team on 01865 572192 out of hours.

You can also contact the

The neuro nurse practitioner team – 01865 234372
(working hours Monday to Friday 09:00 - 17:00 – answer machine outside of working hours)

Or the specialist nurses at your local DGH, where you are treated

Helpful Websites

Support network

www.braintumouruk.org.uk
Helpline: 0845 4500 386. Open 9-5, Mon-Fri
Txt Hedz: 07537410025

support@braintumouruk.org.uk
If you need an interpreter or need a document in another language, large print, Braille or audio version, please call 01865 221473 or email PALSJR@ouh.nhs.uk

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