

CyberKnife

*Information for Patients Receiving
CyberKnife Treatment to the Spine*



Hermitage Medical Clinic

A Hi-Tech Community Hospital for our Patient's Needs



CyberKnife Spinal Treatment

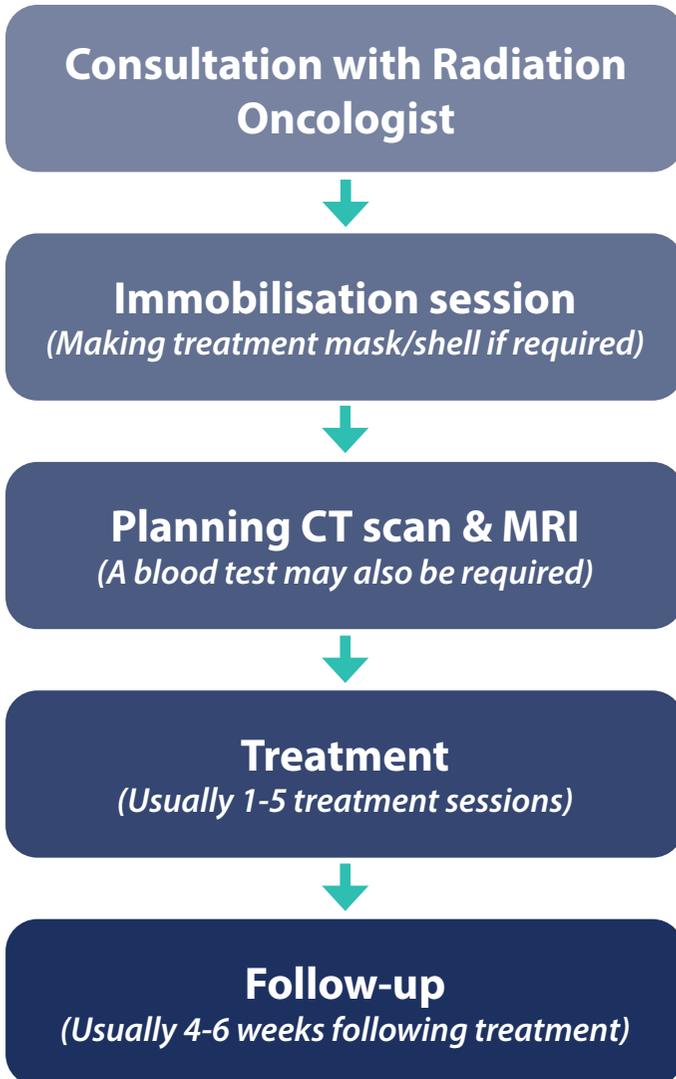
This booklet is designed to give you some information on CyberKnife treatment to the Spine at the Hermitage Medical Clinic. We hope it will provide answers to commonly asked questions. However if there is anything unclear, or there are still questions which it does not answer, please contact a member of the CyberKnife Team.

The CyberKnife is a radiotherapy machine which produces high energy x-rays. The treatment unit is supported on a robotic arm which allows the treatment to be delivered from any angle. It enables high doses of Radiation to be delivered with extreme accuracy. The robot has the ability to track the tumour position throughout the treatment.

CyberKnife treatment does not make you radioactive and it is perfectly safe for you to be with young people, including children after your treatment. CyberKnife treatment is completely painless. You do not see or feel anything during the treatment delivery.

Treatment pathway:

The treatment pathway is made up of a number of steps from initial consultation with your Radiation Oncologist through to your treatment and then follow-up. The order and sequence of these appointments is flexible and the time/dates will be discussed with you when you are first contacted.



Consultation with Radiation Oncologist:

Your first appointment will be a consultation with your Radiation Oncologist. Your Radiation Oncologist will plan and oversee your treatment. At this appointment you can discuss the treatment procedure and any possible side effects. You can ask any questions you have, and you will also sign a consent form for treatment indicating that you understand the treatment and that you are happy to proceed.

Immobilisation Session:

In order to deliver CyberKnife treatment it is very important you are in a comfortable, stable and reproducible position. It can be helpful to wear loose fitting comfortable clothes.

For upper spinal treatment (neck area), the best way to achieve this is to use a thermoplastic mask. This mask will hold you in the correct position for treatment and help you to stay in this position throughout your treatment. This helps to ensure accurate treatment delivery. The thermoplastic treatment mask will be made during your immobilisation session and will be required for your CT scan and your treatment. We will ask you to remove any dentures or hearing aids before making the mask.

For the mid to lower spine, you will not be required to have a mask made. Your Radiation Therapist will discuss this with you when you arrive in the department.

Planning CT scan and MRI:

The next part of the preparation process for Cyberknife treatment is an MRI scan and a CT scan. In some instances we will need to do a blood test before your MRI Scan. These scans are used for planning your treatment. We will position you in a comfortable reproducible position. You will be asked to lie in the same position for your treatment. Once these scan are completed you will be free to go home. The plan will then take approximately 2 weeks before it is ready for treatment. We will call to confirm your treatment start date the week before your treatment.

Treatment process:

Before you go into the treatment room, A Radiation Therapist will explain the treatment process to you and you will have a chance to ask any questions you have. During your treatment you will lie on the treatment couch in the same position as you were for your planning scans. The treatment delivery time is normally 1 hour – 1hr30mins.

In order to ensure the treatment is always delivered accurately and focused on the treatment area, x-ray images are taken. These are then used to make any adjustments that are required. This means that although you may feel you have moved or you are able to move, there is no need to worry as the CyberKnife robot and the Radiation Therapists will account and correct for this. However, as it takes time to correct for movement, the more you move the longer the treatment delivery will take. This is why we ask you to try and stay as still as possible throughout the treatment.

During your treatment the CyberKnife robot will move around you and stop at various points to deliver treatment, it will never touch you. You may also notice the treatment couch moving at various points. The Radiation Therapists are moving the couch from outside the treatment room. This is part of the process to ensure the treatment is accurate.

The treatment is completely painless and the Radiation Therapists are watching you the whole time on CCTV. If you need the treatment to stop, the Radiation Therapists will let you know how to make contact with them and the treatment can be interrupted if absolutely necessary.

Side-effects:

CyberKnife treatment is delivered extremely accurately and only to the area that needs treatment, sparing normal tissue as much as possible. Hence, side effects are kept to a minimum. Side effects will also depend on the location of the treatment. Most patients will experience little or no side-effects. Your Radiation Oncologist and Radiation Therapist will be happy to answer any questions you have regarding possible side-effects.

Nausea and vomiting

Nausea and vomiting can be a side effect. If you are having your mid-spine treated, or the treatment is close to your digestive tract, you may find you experience mild nausea or vomiting. Anti-sickness tablets can be prescribed to help control this. Please speak to one of the Radiation Therapists looking after you if this is a problem.

Pain Flare

Treating a lesion in the spine can cause a temporary increase in the pain at the site of the treatment. Please ensure you have an adequate supply of your pain medication to prevent discomfort.

Skin Reaction

Towards the end of your treatment or even after it has finished, you may notice a slight reddening of the skin around the treatment area. It may also be itchy. This is a normal reaction to radiotherapy can occasionally occur. Please speak to one of the Radiation Therapists looking after you if this is a problem.

Tiredness and Fatigue

Tiredness and fatigue is normal and common. It may continue for a few weeks following treatment. Although you should try to rest when you are tired, light exercise such as a walk can help you to feel better. If you require any more information on the management of tiredness or fatigue please speak to one of the Radiation Therapists.

Sore throat

If you are having your upper spine (cervical Spine), you may experience some discomfort swallowing. Please speak to one of the Radiation Therapists looking after you if this is a problem.

Bowel frequency

If you are having your lower spine treated it is possible that it may affect your bowel. If you notice this is a problem please talk to the Radiation Therapists looking after you.

These side-effects will usually resolve 3-4 weeks following your treatment. However, if you experience any extreme side-effects such as severe nausea/vomiting or severe diarrhoea, please contact the Radiotherapy Department (01-6459045) between 8.30am and 4.45pm Monday to Friday. If outside these hours please contact St. Marks Ward at the Hermitage clinic (01-6459310).

Frequently asked questions

Will my hair fall out?

The radiation dose delivered to normal tissue is so low that it is highly unlikely that hair loss will occur. Also, the dose received by hair follicles is not usually sufficient to cause any permanent damage. Any effects would only be experienced in the region of treatment.

Will I get a skin reaction?

The radiation dose received by the skin is very low. You may get a mild skin reaction. It is unlikely you will experience a severe skin reaction following treatment.

When will I experience any improvement in my condition or any benefits from my treatment?

The success and potential benefits from CyberKnife treatment is dependent on a number of factors. Your Radiation Oncologist will be happy to discuss this with you.

Do I have to stay in hospital for my treatment?

No, unless there is a specific medical reason CyberKnife treatment is delivered on an out-patient basis. Once treatment is finished you are free to go home and continue as normal. Tiredness may be an issue so you may want to consider this when making any arrangements. We do ask that you bring someone with you each day and that you do not drive after your treatment.

If you have any questions about your treatment
please call the Radiotherapy Department on

(01) 6459045

Monday - Friday 8.30 - 4.45pm



The Hermitage CyberKnife Centre

Radiotherapy Department

Hermitage Medical Clinic

Old Lucan Road

Dublin 20

www.hermitageclinic.ie