

ELECTRON TREATMENT



Your Radiation Oncologist has decided that you would benefit from a course of Electron Treatments, a form of Radiation Therapy.

WHAT IS ELECTRON TREATMENT?

Electron treatment is a form of external beam Radiation Therapy. Electron treatment is delivered by a machine known as a Linear Accelerator, or Linac. The Linac produces high energy electron beams that are suitable for the treatment of superficial, small, specific areas of the body/skin. Electron treatment does not cause any pain when it is being delivered.

WHEN IS ELECTRON TREATMENT USED?

An electron beam has low tissue penetration (i.e. it does not travel very far within the body) and is therefore often used to treat a superficial skin cancer, for example. Alternatively, a high-energy X-ray beam is used to treat a cancer inside the body. Electron Treatment is ideal for treatment of small skin lesions anywhere on the body, including on the face and ears. It can also be used in the treatment of raised nodes that may develop on the body as a result of disease spread from other

sites.

Electron Treatment may also be used in the following situations:

- After lesions have been surgically removed to ensure any microscopic cancer cells that might remain after the surgery are destroyed.
- As a “boost” to treat scars in the treatment of certain cancers, such as breast cancers
- Before surgery for benign lesions such as Keloid scars.
- To ablate the parotid salivary glands (i.e. make them stop working) in diseases that cause patients to produce a lot of saliva, such as Motor Neurone Disease.

Once the decision is made to proceed with a course of Electron Treatment, a process of Radiation Therapy planning is put in place as outlined on the following pages.

PROCEDURE/PATIENT PATHWAY

The first step in the process is a ***SIMULATION*** or ***ELECTRON SET UP***.

At this session, the Radiation Therapists, Radiation Oncologists, and Medical Physicists will gather all the information that is necessary to create a treatment plan that is unique to you.

If the area is on the face, is very small, or is close to the eyes, you may need to have a MASK made. The purpose of the mask is to help ensure the utmost accuracy and reproducibility of delivering the treatment, and it also helps you to remain still and in the correct position whilst the treatment is being delivered.

In order to plan the treatment, you may have a CT scan done to help the Radiation Oncologists visualise the area. Alternatively, you may be brought into the Linac room for a trial set-up. During this trial, you will be placed on our

treatment bed in a position that is stable, relatively comfortable for you, and practical enough to allow the treatment to be delivered.

The Radiation Oncologist will mark out the area to be treated. The Radiation Therapists and Physics Team will then carry out a series of measurements and tracings in order to begin planning your treatment. This will entail moving the Linac around you, and perhaps adjusting your position, until they achieve the best possible way to deliver the treatment as the Radiation Oncologist has prescribed for you.

In some situations, it may be necessary to use extra shields to protect areas that do not need to be treated. These may, for example, be placed over the eyes, under the lips or behind the ear.

Once the set-up is complete, the Radiation Therapists will place marks on the skin. If the treatment area is on the face, we can use a pen that makes marks that are not visible to the

naked eye but can be seen when an ultraviolet light is used. It is important that these marks are not washed off, as these will be the guide every day for placing your treatment correctly. Clear stickers will also be placed on these marks to assist you in maintaining them for the duration of your treatment. If a mask has been made for you, the treatment marks will be put on the mask instead of on the skin.

This visit is usually the longest visit you will need – it can take up to 30 minutes for the team to work out the best arrangement for your specific situation. Subsequent visits will take only 5 to 10 minutes in most cases.

WHEN WILL I START MY ELECTRON TREATMENT?

You may receive a start date for your treatment on the day of your simulation appointment. More usually however, the Radiation Therapists will call you with an appointment to attend once the treatment plan has been created and a slot is available on the Linac.

Treatment is usually carried out over the course of a number of weeks, from Monday to Friday. However, some patients may be prescribed treatments on alternate days, other patients may have once weekly treatments and in some instances Electron Radiation Therapy can even be delivered in a single session.

The Radiation Therapists will be able to inform you of how many treatments you are scheduled for when you attend for your first treatment.

It is important to attend your Electron Treatment as

prescribed by your Radiation Oncologist.

YOUR ELECTRON TREATMENT

When you attend for your first Electron Treatment, your plan will have been created specifically for you, whether you had a CT scan for planning or whether you had a trial set-up in the Linac. You will be set up in the Linac room in exactly the same position that you were in at your simulation appointment.

The Radiation Therapists must leave the room once you are in the correct treatment position. However, there are cameras that allow them to watch you from outside the room, and they can interrupt the beam and come into the treatment room at any time if necessary. It is very important that you remain still when the treatment is being delivered.

You will not feel any discomfort while the treatment is being delivered, although you do come quite close to the machine itself and it may touch against your skin gently. You will hear the noise of the machine when it is switched on.

WHAT SIDE EFFECTS ARE ASSOCIATED WITH MY ELECTRON TREATMENT?

As Electron Treatment is a very superficial radiation treatment to a small area of the body, the side effects are quite limited.

- The main side effect will be at the treatment site. You may experience reddening, tightening, drying of the skin within the treatment area. This is a normal response to the treatment. It may begin after a few treatments have been delivered, and it will only start to settle 3 to 4 weeks after the treatment finishes. Often this skin reaction can get a little worse even after treatment is complete before it starts to settle down.
- Do not put anything on the skin at the treatment site: **NO** soaps, gels, creams, make up, powders, adhesive dressings, perfumes, lotions etc.
- Do not scratch or scrub the skin. Wash the area gently with warm water and pat it dry. Do not wet shave over the area receiving the electron Radiation Therapy.
- Avoid anything that might cause extra irritation to the area being treated, such as tight clothing or extremes of hot or cold temperatures. If having treatment on the

head, face or neck, always wear a hat when outdoors to protect the skin from the weather conditions.

- If the area being treated is close to the mouth or nose, it is possible that the tissues lining this area may also become quite irritated since they are particularly sensitive to the effects of Radiation. If this is likely to affect you, your treatment team will explain how best to care for yourself.
- The skin in the treatment area will always remain more sensitive than the rest of your skin in the future. Use total sun block creams and shield the area from the harsh weather where possible.

It is important to remember that the side effects outlined refer only to the skin at the treatment site. It is important that you wash as normal whilst receiving your Radiation Therapy treatment. Simply apply the above guide lines to the skin at the treatment site.

PLEASE DO NOT PUT ANY THING ON THE SKIN AT THE

**SITE OF TREATMENT THAT IS NOT RECOMMENDED
DIRECTLY BY THE RADIATION THERAPY TEAM IN THIS
DEPARTMENT.**

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This information is designed to give you an over view of Electron Radiation Therapy and its associated side effects. Please remember not everything will apply to you. If you have any questions, please do not hesitate to ask any member of the Radiation Therapy team – they are the best people to advise and help you.

USEFUL INFORMATION

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