



Total lymph node irradiation (TLNI)

This information is for patients at Mount Vernon Cancer Centre.

This leaflet is written for patients who will be having total lymph node irradiation (TLNI). If anything is unclear, please ask one of the team treating you.

Total lymph node irradiation (TLNI) is treatment of the lymph nodes in the body with high energy x-rays (radiotherapy). The x-rays cause biological effects which reduce the number of white blood cells (your blood count will fall), making the immune system less effective.

This treatment can be given for transplant rejection that is not responding to the standard drug therapy. Radiotherapy is completely painless. It is similar to having an x-ray picture taken, except instead of taking a picture, the machine delivers x-ray treatment.

TLNI is carried out in two phases:

- treating the lymph nodes in the upper half of the body, then
- treating the lymph nodes in the lower half of the body

You could be seen by both male and/or female radiographers when you have your radiotherapy planning and treatment.

Planning

Before you begin your radiotherapy you will be asked to visit the Radiotherapy Department to have your treatment planned. This session helps to define the positions of the main lymph node chains and other important parts of your body, such as the lungs and kidneys, to ensure they are shielded from the radiation.

Your planning session will take place in a CT Simulator. You will be asked to undress (depending on the area to be treated) and lie flat on the bed in the position in which you will have your treatment. We will maintain your dignity as much as we are able. You will have a short CT Scan which will take about five minutes. The radiographers and oncologist will draw some marks on your skin with a felt tip pen. These marks will wash away so, with

your permission, the radiographers will make some tiny permanent marks on your skin (tattoos). These are very small and are done by pinpricking the skin with some special dye. The permanent dots are important as they enable accurate positioning and treatment delivery each day.

After this session you will be given an appointment to start your treatment. This is usually a few days later.

Treatment

You will have four treatments to the upper half of your body and then four treatments to the lower half of your body. The radiographers will explain this to you.

The treatment is given on a machine called a linear accelerator (LA). You will be asked to undress (depending on the area to be treated) and lie on the treatment couch in the same position as you did when you had your planning done. We will maintain your dignity as much as we are able.

The room lights will be dimmed and the radiographers will position the machine to line up with the permanent marks that were put on your skin when your treatment was planned.

When all the adjustments have been made and you are in the correct position, the radiographers will make sure you are comfortable before leaving the room to give you your treatment. You will be asked to breathe normally during treatment.

The radiographers may need to take some xray pictures to confirm you are in the correct position. The machine will move around you. The treatment will last only a few minutes. You will be alone in the room but the radiographers will be able to see you at all times through closed circuit television. They will also be able to talk to you via an intercom.

Blood tests

This treatment can cause your blood count to fall so you will need regular blood tests twice a week. If your blood count becomes low you may need to have blood tests every day.

These will need to be checked before you can have your treatment. The radiographers will let you know when you need to have blood tests.

Side effects

The doses of radiation used for this treatment are very low and unlikely to cause many side effects. The skin in the area being treated may get slightly red and itchy. The radiographers will explain the exact treatment area on your body.

When the upper half of your body is being treated, there may be slight soreness in the mouth and oesophagus (food pipe) which can feel like a lump in the throat when swallowing. When the lower half of your body is being treated you may feel sick or have mild bowel problems (diarrhoea).

The treatment includes large areas of bone marrow, so the bone marrow may not be able to maintain the number of circulating blood cells (see 'Blood tests'). However the doses of radiation used are low, so long-term side effects are unlikely.

In women, the ovaries may be damaged and it is possible that periods may stop and symptoms of the menopause ('the change') occur. If this happens, the symptoms can be treated with hormone replacement therapy (HRT) but you will become infertile. Male fertility is not affected by this treatment.

Skin care

1. Continue to use your normal skin care routine. Wash the treated area gently and pat dry.
2. You may use a mild unperfumed deodorant, but if your skin becomes red you must stop.
3. You may use a moisturiser in the area being treated.
4. Do not use perfumes.
5. When the upper body is being treated, only use an electric razor to shave your face. Do not shave under your arms.

General

It is important to continue to eat as normal during your treatment. Try to drink up to two litres of fluid a day.

If you feel unwell, either let the radiographers treating you know or, if you are an inpatient, let the nurses on your ward know and they will arrange for any medication if required.

Do not smoke whilst having treatment as it can make your reaction a lot worse.

If your bowels become loose, you may need to cut down on the fruit and vegetables you are eating. Please tell the radiographers or nurses as they can advise you.

Side effects may continue for 7-10 days after you finish your treatment and then they will start to settle down.

We hope this leaflet helps you to understand a little more about TLNI. If you have any questions, please ask the radiographers who treat you.

Contacts

Your oncologist:

Your specialist nurse:

Your hospital number:

Mount Vernon Hospital switchboard: 020 3826 2020

Radiotherapy Clinic Radiographers:020 3826 2612 / 2613 or 07825 024058

Lynda Jackson Macmillan Centre: 020 3826 2555

24 hour Acute Oncology Service
Mount Vernon Cancer Centre: 07825 028855