Information for patients receiving Superficial X-ray (SXR) treatment

Waikato Regional Cancer Centre
Welcome to Waikato Regional Cancer Centre. The aim of this booklet is to provide information on the superficial x-ray (SXR) treatment procedure and to explain the journey from your first meeting with the radiation oncologist to the completion of your treatment.
Superficial x-ray (SXR) treatment

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What is Radiation Therapy?
Radiation therapy is the use of x-rays to damage cancer cells. Radiation therapy is planned to treat as little of the normal cells in the body as possible.

Each treatment visit of radiation therapy is called a fraction. The number of fractions varies depending on an individual’s needs and the area being treated. The radiation therapy treatment is often spread over two to three weeks.

What is superficial x-ray (SXRx) treatment?
SXRx is a type of radiation therapy treatment which specifically targets areas close to or on the skin surface. Treatment affects only the area targeted and does not leave any radiation behind in the body.

First Specialist Appointment (FSA)
Your doctor (radiation oncologist or their registrar) will explain the SXRx treatment procedure to you. Your diagnosis, treatment options and potential side effects of treatment will be discussed. If you agree to have SXRx treatment, a form will be signed to record that this discussion occurred. For the potential side effects please refer to section ‘Effects of Treatment’ on page 7 in this booklet.

SXRx treatment mark up
A SXRx mark up appointment is needed to define the treatment area. Your radiation oncologist will draw on your skin the area to be treated.
A cut-out will then be made to fit the marked treatment area. This is a thin piece of lead shielding with a hole cut into it (see picture on previous page). This hole allows the x-rays to pass through onto the skin surface, while shielding the rest of your skin. A tracing and photographs of the area are also taken to reproduce the treatment site when you come for treatment.

Calculating the dose
Using the information obtained from the SXR mark up, a dose is calculated for your treatment. Time is required for the planning calculations and checks to be done. Treatment is started as soon as possible following the completion of this process.

SXRx treatment
For treatment you will be set-up in a similar position to what you were in for your mark up appointment. The radiation therapists may move you to achieve the correct treatment position. Please do not assist staff unless requested, as the adjustments are often small. Please inform staff of any painful areas or assistance you may require to lay comfortably.

The area to be treated will be re-marked on your skin by the radiation therapists and they will move the SXR machine into position over your treatment marks (see picture below). **You should feel slight pressure, but you should not feel discomfort.**
The radiation therapists leave the room to deliver your treatment. They are watching you the entire time the treatment is being delivered. If you need assistance or are in pain, you may wave or call out and the treatment can be stopped. Treatment time can vary according to the area being treated, but it is usually the same prescribed dose each day. You will not feel anything, but you may be aware of a faint ‘beep’ from outside the room.

**Effects of treatment**
At the time of your treatment a radiation therapist will discuss your treatment plan, including potential side effects, skin care and how long you will be in the department for each treatment appointment. This is a chance for you to ask any questions. It might be a good idea to write these down in the back of this book.

SXR treatment is a localised treatment, so most side effects are related to the body site being treated. Everyone is affected differently by SXR and the severity of side effects varies from person to person. If you experience any of the following side effects, please notify a member of staff.

Potential side effects include but are not limited to:

<table>
<thead>
<tr>
<th>Early side effects (can occur days to weeks after starting radiation therapy treatment)</th>
<th>Late side effects (may occur months or years after radiation therapy treatment)</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Skin changes (reddening, itching, dryness, skin breakdown)</td>
<td>• Skin changes (increased/reduced pigmentation, tiny blood vessels under the skin may develop (telangiectasia), fibrosis, thinning (atrophic))</td>
</tr>
<tr>
<td>• Loss of hair in the treatment area</td>
<td>• Permanent hair loss in the treatment area</td>
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</tbody>
</table>

The peak of any reactions/side effects you may experience may not occur until approximately 7-21 days after the completion of your SXR treatment.

If you have any concerns or experience any side effects, please speak to the radiation therapists, and where necessary they can organise for a nurse or oncologist to see you.
Treatment review
You will see your radiation oncologist or their registrar in a regular review clinic while you are on treatment. Clinic days and times are specific for each oncologist. We try our best to coordinate these times with your treatment appointment, but it is not always possible. If you have any concerns before these appointment times, please speak to the radiation therapists and where necessary they can organise for a nurse or oncologist to see you.

Appointment schedule
When scheduling appointment times, effort is made to accommodate other commitments but unfortunately it is not always possible, as the SXR machine only runs at certain times of the day. Appointment times may need to be rescheduled at short notice due to machine timetable changes.

Please bring your appointment schedule with you daily and place it on the GREEN machine counter when you arrive.

Please note the radiation therapy department is open Monday-Friday, including all public holidays (except Good Friday and Christmas day).

Skin care
The SXR treatment is targeted specifically at the skin. The skin side effects you will expect are related to the area being treated.

The following advice may help minimise skin reactions while receiving SXR treatment.

- Be gentle with skin in the treatment area and do not scrub at pen marks.
- Avoid shaving, use of wax or creams for hair removal.
- Wash the area regularly with a mild, unscented soap and pat (not rub) the area dry with a soft, natural fibre towel.
- Do not apply anything to skin in treatment area (e.g. cosmetics or plasters), except products advised by a member of your oncology team.
- Do not expose the skin in the treatment area to extreme temperatures. Avoid very hot water (warm showering is suitable though), heating
pads, hot water bottles, electric blankets and/or ice packs directly on the treated skin.

- Avoid swimming whilst on treatment, unless your radiation oncologist has stated otherwise.
- Wear loose fitting natural fibre clothing next to the skin.
- Keep the area covered when out in the sun. Do not apply sunscreen to the area being treated while on treatment. If outside avoid exposing the area to direct sunlight by keeping the skin covered i.e. wear a wide brim hat. Once the treatment has been completed and any skin reaction resolved, you should use a SPF30 or higher on the recently treated area.

What can I use on my skin?

Cetomacrogol cream
Available at your local pharmacy (no prescription required).
This is a moisturising cream that will keep your skin hydrated and may help reduce any itchiness you may experience during treatment.

Sorbolene cream with 10% Glycerin
Available at your local pharmacy (no prescription required).
This is an effective moisturiser that has moisture retaining qualities, and has a mild anti-pruritic which acts as a soothing agent to reduce itching.

Calendula cream
Available at your local pharmacy (no prescription required).
This cream is derived from the marigold plant and some research indicates it is beneficial for itchiness and pain associated with radiation-induced skin reactions. However, the cream must be paraben free and with no additional fragrances.

If the skin reaction progresses your radiation oncologist or nurse may advise the following:

Hydrocortisone cream
Available on prescription by a doctor.
This may be used if the skin becomes itchy and/or irritated. It should
only be used for one to two weeks, as excessive use may thin the skin. Continue with moisturiser as advised.

**Manuka honey**  
*Available from the radiation oncology nurses.*  
If the radiation reaction causes the skin to break down, Manuka honey may be recommended. Manuka honey is known for its antibacterial properties and can help avoid infection.

**Silver Sulfadiazine cream**  
*Available on prescription by a doctor.*  
This is used on broken skin once the treatment has been completed. It has antibacterial properties and is used to avoid infection.

**After treatment**  
The area being treated may become inflamed and crust over. This is completely normal and may take some weeks to completely heal. Keep washing the area regularly. If you are using creams or medications to manage treatment related side effects, ensure that you have enough to manage these for at least four weeks. Speak with your oncology team if more supplies or prescriptions are necessary.

**Wellbeing**  
**Mental wellness**  
The diagnosis of cancer and undergoing treatment can add additional stress to your life. Anxiety and depression are common among patients during and following cancer treatment. It is perfectly normal to feel emotional about the journey you are going through and everyone deals with the situation differently. You may find it helpful to talk to family and friends about how you are feeling or if you would like professional and psychosocial support please mention this to a radiation therapist.

**Hair loss**  
SXR treatment can affect the hair follicles within the treatment area, often causing hair loss if a certain dose is reached. This hair loss can either be temporary, (hair will grow back after treatment) or at times it can be permanent.
Follow-up
At the completion of your treatment an appointment will be made for you to have a follow up check back in our clinic. The timing of this will depend on the area that you are having treated and what side effects you may have experienced during treatment. An individual long term follow up plan will be arranged; including working in with other check-up appointments you may have i.e. plastic surgery.

If you have any questions or concerns between the end of your SXR treatment and this follow up appointment, you can contact your GP or one of the numbers below.

Useful numbers

- Waikato Hospital Switchboard 07 839 8899
- SXR Staff ext: 94848
- Oncology Outpatient Reception 07 839 8604
- The Cancer Society's Lions Lodge 07 834 2351
- Cancer Society - Hamilton 07 838 2027
- Cancer Society Information Helpline Staff 0800 226 237
- Wilson Parking 07 839 8901

For more information on skin cancer please visit: https://www.healthnavigator.org.nz/ Type: Skin Cancer