The innovative, flexible wound dressing for the prevention and treatment of radiation dermatitis
What is radiation dermatitis?

You and your doctor have decided to start radiation therapy. Radiation therapy uses high doses of radiation to shrink tumors. The radiation that destroys cancer cells also injures nearby healthy cells. This is why you may experience some side effects. This brochure will help you understand and manage those side effects before they appear.

- Radiation dermatitis is a common side effect which occur during ongoing radiation treatment.
- Radiation dermatitis is different to burns. The damage occurs in the deep layers of your skin.
- You will see the skin damage approximately 10–14 days after the first fraction of radiation, corresponding with the time it takes for the damaged cells to migrate to the surface of your skin.¹
- If the new cells reproduce faster than the old cells are shed, your skin will become dry and flaky (dry desquamation).²
- As radiotherapy continues your body may not produce enough new cells to replace the old ones and therefore the outer layer of your skin may become broken and oozing (moist desquamation).²
- The severity of the skin reactions may increase for 2 weeks after radiation therapy completion.

This brochure was developed thanks to the experience of patients and health care professionals, like nurses and oncologists, in order to support and help you during these challenging days.

How radiation therapy affects skin function

Radiotherapy starts

No visible changes. However skin cells are damaged from the first dose of radiation.

The inflammatory response is activated in response to this insult. Damaged cells migrate to skin surface at an increased rate.

Skin heals

Skin in the treated area may not recover to the same appearance as before.

The rate of new skin cell production is increased to cope with the radiation damage – dead skin layer becomes thicker and dry.

Radiotherapy ends

New healthy skin cells begin to recover. However the integrity of the skin may continue to deteriorate until the new cells repopulate the area.

The rate of new cell production is insufficient to replace those lost to radiation, which causes a breakdown in the integrity of the skin. This imbalance continues until radiation therapy is stopped.

Images courtesy of The Princess Royal Radiotherapy Review Team, St James’s Institute of Oncology, The Leeds Teaching Hospitals NHS Trust. Taken from the publication “Managing Radiotherapy Induced Skin Reactions, a Toolkit for Healthcare Professionals”.

²
Protect and care your skin

Make sure your clothing covers the area being treated when you are outside.

Wear clothes that are loose.

Choose clothes and bed sheets made of soft materials.

Sunscreens should be used to offer maximum protection from sunlight.

Use non-perfumed and mild soap and toiletries.

Shower or bathe with warm, not hot, water.

Gently pat your skin dry after showers or baths.

Avoid swimming in chlorinated water as it can have a drying effect on the skin.

Don’t rub off the markings your radiation therapist made on your skin. They show where to place the radiation.

Don’t put anything that is very hot or cold on the area getting radiation.

Use an electric razor if your doctor or nurse says you can shave.

Don’t “wet-shave” or use hair removing products.

“Some people in my cancer support group had dry and itchy skin. When my skin started hurting, my nurse told me how to care for the treated area. And of course, I covered my skin when I was outside even for a few minutes.”

Check with your doctor or nurse before you put anything on your skin.

Remember that common skin care products, cosmetics and deodorants can be contraindicated or not suitable to use for radiation dermatitis skin changes.

Tell your doctor or nurse if your skin stays wet or if you have sores.

**Redness**
Your skin in the treatment area may look as if you have a mild to severe sunburn or tan.

**Pruritus**
The skin in your treatment area may itch so much that you always feel like scratching. Scratching can compromise skin integrity.

**Inflammation**
You may experience swelling pain and heat in the treatment area.

**Dry desquamation**
This is when the skin in your treatment area gets thicker and very dry. Your skin may peel like it does after a sunburn.

**Moist desquamation**
Radiation destroys skin cells in your treatment area, faster than they can grow back. The skin may break down, become wet, or infected. This is more common where you have skin folds or very thin skin, such as behind your ears, under your breasts or your neck.

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### Stages of radiation dermatitis:

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<thead>
<tr>
<th>Stage</th>
<th>Symptoms</th>
<th>Treatment Goals</th>
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<tbody>
<tr>
<td>RTOG 0</td>
<td>No visible change.</td>
<td>Maintain soft, supple, clean, odour free and intact skin.</td>
</tr>
<tr>
<td>RTOG 3</td>
<td>Confluent moist desquamation, pitting oozing.</td>
<td>Reduce the risk of infection, minimize pain and trauma to the skin.</td>
</tr>
<tr>
<td>RTOG 4</td>
<td>Ulceration, bleeding, necrosis.</td>
<td>To debride the wound. To control associated bleeding and oozing (exudate), minimize effects of wound infection.</td>
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StrataXRT – how does it prevent and treat the radiation dermatitis?

<table>
<thead>
<tr>
<th>Scale, Symptoms and Skin Changes</th>
<th>Treatment Goals</th>
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<tbody>
<tr>
<td><strong>RTOG 1</strong></td>
<td><strong>Maintain soft, supple, clean odor free, intact skin, reduce irritation and promote comfort.</strong></td>
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<tbody>
<tr>
<td><strong>RTOG 2a</strong></td>
<td><strong>Promote hydrated skin, comfort and maintain skin integrity. To reduce itch, pain, soreness and discomfort.</strong></td>
</tr>
<tr>
<td>Sensitive skin with bright redness, with/without dry desquamation. Tightness/itch/sore.</td>
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<tr>
<td><strong>RTOG 2b</strong></td>
<td><strong>Reduce risk of complications of further trauma and infection. To reduce pain, soreness and discomfort.</strong></td>
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<tr>
<td>Patchy moist desquamation, moderate oozing.</td>
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- Initially, maintaining integrity of the skin.
- Reducing potential for further exacerbation of the skin reaction.
- Minimizing water loss and providing hydration to the skin by means of topical agents.
- Promotion of comfort and compliance.
- Reduction of pain and itching.
- Control of bleeding, odor and excessive clear fluid (exudate), (in combination with secondary dressings).
- Provision of ideal environment for rapid healing (re-epithelialization).
- Promotion of a moist wound healing environment, in the stages where skin is broken.
- Protection from trauma and friction.
- Avoiding bolus effect.
StrataXRT – for the prevention and treatment of radiation dermatitis

StrataXRT is an innovative flexible wound dressing.

- Unlike common used moisturizers, StrataXRT is specifically developed for the prevention and treatment of radiation dermatitis.
- StrataXRT special formula is developed in order to spread easily using a very little amount of product.

StrataXRT dries to form a thin, flexible, protective layer that is gas permeable and waterproof.

- Provides hydration while minimizing trans epidermal water loss (TEWL).
- Lightly bonds to the most superficial damaged skin layer.
- Protects compromised skin areas and superficial wounds.

StrataXRT helps to promote a moist wound healing environment for widespread superficial wounds and burns.

- Rapid healing and a faster skin recovery of the skin post therapy.
- Reduces the skin’s acute inflammatory response.
- Relieves low grade inflammatory changes such as dry, itching, flaking, peeling and irritated skin.
- Maximizes your comfort.
- Can be used immediately after radiation treatment or on first and second degree burns.
- Does not cause bolus effects.
- Maintains skin integrity.
- Minimizes progression of skin reactions during ongoing radiation treatment.

Check with your radiation nurse or doctor, if StrataXRT is suitable for you.
StrataXRT directions for use

- Ensure that the affected skin or superficial wound is clean and dry.
- Gently pat dry excess exudate (fluid) from the area prior to application.
- Apply a thin layer of StrataXRT directly to the affected area and allow the gel to dry.
- StrataXRT should be applied once or twice daily to affected areas or as advised by your physician.
- Once dry, StrataXRT may be covered by sunscreen, cosmetics and clothing.
- For best results StrataXRT should be maintained in continuous contact with the skin (24 hrs/day).
- If not completely dry, StrataXRT may stain your clothing.

StrataXRT is recommended to use from the first dose of radiation therapy in order to enhance results.

Tips for StrataXRT usage

When applied correctly to the affected areas, StrataXRT should be dry in 5–6 minutes. If it takes longer to dry you have probably applied too much. Gently remove the excess with a clean tissue or gauze and allow the drying process to continue.

Normal washing will not remove the product from your clothes. Dry cleaning is advised for best results.

StrataXRT may also be used in conjunction with other treatments to improve overall results. StrataXRT can be used with or without a secondary protective dressing. StrataXRT may be kept in the refrigerator to relieve sunburn feel during application.

StrataXRT may be applied more frequently to relieve pruritus.

Recommended duration of treatment

StrataXRT is recommended as prophylaxis following the initial radiation dose and should continue to be applied for a minimum of 60–90 days (24/7) post radiation therapy, or until no further improvement is seen. For chronic radiation dermatitis, continued use is recommended until no further improvement is seen.

How much StrataXRT is required?

StrataXRT gel is a unique formulation that requires substantially less product per application than typical moisturizing creams or barrier ointments, as it dries to form a flexible wound dressing.

Ingredients: Polydimethylsiloxanes, Siloxanes, Alkylmethyl Silicones.
StrataXRT is an innovative flexible wound dressing for the prevention and treatment of radiation dermatitis.

StrataXRT dries to form a protective layer, which prevents the early symptoms of radiation dermatitis to exacerbate.

StrataXRT helps to promote a moist wound healing environment, which leads to rapid healing and faster re-epithelialization post therapy.

Visit our website for more information about the prevention and treatment of radiation dermatitis

www.strataxrt.com

References:

Talk with your doctor or nurse. Some skin changes can be very serious. Your treatment team will check for skin changes each time you have an appointment for radiation therapy. Make sure to report any skin changes that you notice.

Do not hesitate to ask any question to your doctor or nurse. You may want to write them down before to discuss everything through.

Remember that you are the most important member of your treatment team.

Manufactured by: Stratpharma AG, CH-4051 Basel, Switzerland, www.stratpharma.com