



Radiation Therapy to the Head and Neck

You are getting radiation to your head and neck as part of your cancer treatment. This factsheet is about side effects that could happen. It also tells you ways to manage the side effects.

Possible Side Effects

Sore mouth, sore throat, and difficult swallowing. You may have a sore mouth and throat that makes it hard to eat and swallow. This usually starts 2–3 weeks after your first treatment. It should start going away 2–3 weeks after you complete treatments. Your cancer care team will give you a mouth rinse to ease the pain. Tell your cancer care team about any discomfort you have.

Weight loss. Eating well may be hard while you have treatments. Your cancer care team will check your weight at least once a week. They will also check how much fluid and food you take in. You may need liquid food supplements such as Sustacal®, Boost®, or Ensure®. If you cannot eat enough food to maintain your weight, you may need a temporary feeding tube. Talk about your concerns with a dietitian and your cancer care team.

Irritants. Avoid hot liquids, fresh citrus juices, and spicy foods. These may irritate the treatment area and delay healing. Avoid tobacco and alcohol. These will dry and irritate your throat.

Dry mouth and problems with teeth and gums. If your saliva (spit) glands are in the treatment area, you will produce less saliva. The saliva may be very thick. You can gargle or drink club soda to help get rid of the thick mucus.

Signs of mouth dryness may begin during the first week of radiation. They can continue for many months. To increase saliva, suck on sugar-free hard candy, popsicles, or gum.

A dry mouth can raise your risk of tooth decay and other dental problems. Visit your dentist before you start radiation treatment.

Careful hygiene is very important to help you keep a healthy mouth during and after treatment. These tips can help:

- Gently clean and floss your teeth twice each day. Do not use water picks. The pressure may damage sensitive tissue.
- Rinse and gargle at least four times a day with a salt and soda mixture. Mix ½ teaspoon baking soda and ½ teaspoon salt in 1 quart of water. Do not gargle with hydrogen peroxide or mouthwashes that contain alcohol. They can irritate your mouth lining.
- Drink at least eight cups of liquid each day. Some people find it helpful to carry a water bottle with them throughout the day.
- Try breathing through your nose rather than your mouth.
- To keep the air moist at night, use a humidifier near your bed.
- Use lip balm to keep your lips moist. This may help your mouth feel less dry.
- If you wear dentures, swelling in your gums may change the fit. You may need to stop wearing your dentures until treatments are finished.

If these ideas do not help with dry mouth, talk with your cancer care team about using artificial saliva or a prescription medicine.

Hair loss. After about two weeks, you will start to lose hair in the area that was treated. It will usually begin to grow back within 3–6 months after radiation treatment ends. Use only an electric razor if you shave the treated area. Hair loss may be permanent, depending on the amount of radiation you get.

Ear problems. For a few patients, peeling skin and wax may plug the ear canals after the treatments are complete. If your ears feel plugged, tell your cancer care team. They can safely loosen and remove the wax.

Taste changes. If your tongue is in the treatment area, you may notice changes in your sense of taste. This happens within the first two weeks of treatment. Usually, your sense of taste will start to return slowly within months after treatment ends. It can keep improving for years.

Swollen glands. Some patients have swollen, tender salivary glands after the first few days of treatment. It can cause mild pain, but usually goes away by itself. Your cancer care team can recommend medicine to ease pain if needed.

Fatigue. Feeling tired, or fatigue, is a common side effect of radiation treatments. Take good care of yourself while you are in treatment. Keep a balance between exercise and rest. If you feel very tired, you may need extra rest. Many patients find that mild exercise such as walking can improve energy levels. Talk to your cancer care team before you begin exercise.

Skin changes. The effects of radiation on the skin depend on a number of things:

- Number of treatments
- Total radiation dose
- Sun exposure of the treated area before radiation therapy
- Overall health

Side effects to the skin occur only where the radiation enters and exits your body. If you are not sure where these areas are, ask your cancer care team. Take care of your skin from the first day of radiation, before side effects happen.

These skin changes may happen after a week or two of radiation treatment:

- Gets dry or itchy
- Turns darker, pink, or red
- Becomes sore and tender
- Peels or gets blisters

Radiation skin changes happen slowly over time. They may last for a while after radiation treatments end. Most effects go away after 2–4 weeks.

Here are some tips to help protect your skin:

- Wash gently with warm water. Do not scrub. Use your hands, not a washcloth. Pat dry with a soft towel.
- Use a mild soap without perfumes or deodorants.
- Avoid rubbing on treated skin. Do not wear tightfitting hats or scarves. Cotton fabrics are the least irritating.
- Do not use adhesive bandages or tape in the treated area.
- Avoid temperature extremes. Do not use heating pads, hot water bottles, or ice packs on the treated area.
- Keep treated skin protected from the sun. Use sunscreen with at least SPF 30 when outdoors.
 Wear a wide-brimmed hat and clothing with long sleeves and legs. Do not use tanning beds.
- Use only an electric razor if you shave the treated area.

These suggestions can help manage skin changes:

- Apply a moisturizing cream, lotion, gel, or oil to radiated skin. Do not use lotion right before your radiation treatments. Put it on at least 4 hours before.
- Choose products for sensitive skin. Avoid products with perfume or deodorant.
- If a product stings, stop using it.
- If your skin becomes tender or itchy, try using a 1% hydrocortisone cream from the drugstore. If necessary, your cancer care team may prescribe a steroid cream.

These side effects may go on after your last treatment. If you have concerns, please talk with your cancer care team.