Your doctors suggest radiation to the head and neck area as part of your cancer treatment. This sheet discusses possible side effects and ways to manage them.

### Possible Side Effects

**Sore mouth, throat, and difficulty swallowing.** You may have difficulty eating and swallowing. These symptoms may develop within two to three weeks after your first treatment. You may feel some discomfort but it should improve within two to three weeks after you complete treatment. You will be given a special mouth rinse to provide relief. Your health care provider should look at your mouth weekly or as needed. Discuss any discomfort you have with your health care team.

**Weight loss.** Eating well may be hard while you have treatments. Your health care team will check your weight at least once a week and assess your fluid and food intake. You may need supplements such as Sustacal®, Boost®, or Ensure®. If you cannot eat enough food to maintain your weight, a feeding tube may be used on a short-term basis. Discuss your concerns with a dietitian or your health 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 dental problems.** If your salivary glands are in the treatment area, you will produce less saliva. The saliva may become very thick. You can gargle or drink club soda to help get rid of the thick mucus. Symptoms of mouth dryness may begin during the first week of treatment and can continue for many months. Some mouth dryness may be long-term. 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 treatment.

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

- During treatment, gently clean and floss your teeth twice daily. Do not use water picks. The pressure may cause damage to sensitive tissue.
- During treatment, rinse and gargle at least four times a day with a salt and soda mixture. Combine ½ teaspoon baking soda and ½ teaspoon salt in one quart of water. Do not use hydrogen peroxide or mouthwashes that contain alcohol as a gargle. These may irritate the lining of your mouth.
- Drink at least eight cups of liquid each day. Some patients 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 an ultrasonic vaporizer near your bed.
- Keep lips moist by using lip balm. If your lips are moist, your mouth may feel more moist.
- 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, you may want to use artificial saliva. Your doctor may prescribe Salagen® (pilocarpine) tablets to help.

**Hair loss.** After about two weeks, you may lose hair in the treated area. This may or may not be permanent and depends on the dose of radiation you receive. Hair usually begins growing back within three to six months after you complete radiation.

**Ear problems.** The skin in your ear canals may receive radiation. This is rarely a problem, but the skin may peel after your treatment is over. Dry skin mixed with ear wax may need to be loosened with mineral oil and
gently removed. If your ears become plugged, tell your health care team.

**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. In most cases, your sense of taste will start to return slowly within months and improve for up to years after treatment.

**Swollen glands.** Some patients have swollen, tender salivary glands. This feels like having a case of the mumps and occurs in the first few days. It can cause mild pain, but usually goes away by itself. You may take a mild anti-inflammatory such as ibuprofen to relieve this symptom.

**Fatigue.** Feeling tired is common. Take good care of yourself while you are having treatments. Many patients report that mild exercise such as walking can improve energy levels. However, your level of activity should depend on what you feel like doing. If you feel very tired, you may need extra rest.

**Skin changes.** Side effects to the skin occur only in areas where the radiation enters and exits your body. If you are unsure where your treated areas are, ask your health care provider.

After a week or two of treatments, your skin will start to become dry. It may darken, turn pink to red, itch, or feel tender. You should take care of your skin from the first day of radiation, before you notice these changes.

Here are some guidelines to help protect your skin:

- Wash skin gently with warm water. Do not scrub. Use your hand rather than a washcloth and pat dry with a soft towel.
- Use a mild soap that is free of perfumes or deodorants.
- Do not use adhesive products such as bandages or tape in the treated area.
- Avoid extreme heat or cold on the skin. Do not use heating pads, ice packs, or hot water bottles on the skin.
- Avoid exposing treated skin to the sun; it will be more sensitive. When outdoors, use a PABA-free sunscreen that is at least SPF 30 and wear a wide-brimmed hat. Avoid tanning booths.
- Use only an electric razor if you shave within the treated area.

These suggestions can help you manage skin reactions:

- Apply a moisturizing cream, lotion, gel, or oil to radiated skin. Choose products for sensitive skin, and avoid products with perfume or deodorant.
- If a product stings, stop using it.
- If your skin becomes tender or itchy, try using an over-the-counter one-percent hydrocortisone cream. If necessary, your health care provider may prescribe a steroid cream.

**Symptoms may continue after your last treatment.** If you have any problems, please talk to your health care provider about your concerns.