Radiation Therapy to the Head and Neck

You and your doctor have chosen radiation therapy as part of your cancer treatment. This handout describes radiation therapy:
- What to expect.
- How to care for yourself during treatment.
- How to reduce side effects and increase your comfort during treatment.

Most often, 25 to 35 radiation treatments are prescribed. The radiation treatment itself is just like having an X-ray. It is not painful and you will not feel anything.

Treatment Planning

Once the decision to proceed with radiation has been made, you will be scheduled for a planning session or a simulation. This session will last between 30 minutes and 1 hour.

During this session, your doctor will take X-rays that will help target the radiation treatment area. Before the filming starts, you will be fitted with a special device made of perforated plastic. It will be molded to the shape of your head, neck and upper shoulders and is attached to the treatment table. This will help insure that you are in the correct position during the treatments. You will not have any marks on your skin, as the marks will be placed on the plastic head/neck device.

Treatment Schedule

The treatments are given Monday through Friday over 5 to 7 weeks. Your therapist will work with you to set up daily appointment times, each lasting 15 to 20 minutes. While the actual treatments take only a few minutes, it is best to allow an hour for:
- X-rays.
- Meetings with your doctor or nurse.
- Any unexpected delays.

X-rays are done weekly to assure the precision of your position on the table. The X-rays are not used to diagnose problems and do not assess treatment effects.
You will meet with your doctor at least once a week on ___________________________. Your treatment and side effects are checked during these visits. Any concerns about your disease and treatment can be discussed at this time.

**Skin Marks**

Most times, a close fitting, plastic mask is used to keep your head still during your treatment. If a mask is used, you will not have any marks on your skin, as the marks will be placed on your mask.

If a mask is not used, often ink pen marks are used. To prevent the loss of these marks, clear medical tape is often placed over the ink. Do not remove this tape or the marks. Take care when you wash your skin so that you do not wash off the marks. If your marks start to fade, please tell your therapist. Do not redraw them yourself. If you are allergic to tape, tell your therapist or nurse.

**Common Side Effects**

**Skin Changes**

During radiation you may notice some changes to the skin in the treatment area. After 2 to 3 weeks of radiation, your skin in the area may redden or darken and become dry. By the 3rd and 4th week it may itch, burn or peel. If you are getting both chemotherapy and radiation, your skin may change sooner.

To ease discomfort and protect your skin from more irritation, follow these guidelines to care for the skin affected by radiation therapy:

- Clean the area with a bath soap for sensitive skin. Some suggested soaps are: Basis® for Sensitive Skin, Dove® for Sensitive Skin, Cetaphil®, or Neutrogena® Unscented. Avoid soaps that are heavily scented or anti-bacterial.
- Use lukewarm water on the affected area. Hot water can further irritate the skin.
- Gently clean using the palm of your hand or a very soft cloth.
- Pat your skin dry. Do not rub.
- Do not shave the treated area. It may cause more irritation. A cut would be slow to heal and may become infected.
- Do not use heating pads or ice packs on the treated area. Extreme temperatures can cause more skin damage.
- Avoid exposing the affected skin to sunlight.
- For clothing, choose soft materials like cotton, silk, or knits. Some fabrics like wool may be irritating. Also, crew neck or open necked polo-type shirts work well if your neck area is affected.

You may apply a moisturizing cream, such as Remedy® Skin Repair or Miaderm®, 3 times per day to the area being treated. But, please do not put any cream on your skin within 2 hours of your treatment as it will make your skin more sensitive to the effects of radiation.
Dry Mouth
Sometimes radiation can cause the salivary glands in your neck and mouth to produce less saliva. You may notice that your:
- Mouth is dry and has very little saliva.
- Saliva may become very thick and sticky.

Both of these effects can make it difficult to swallow or to eat your usual foods. There are a number of different products that you can use to help keep your mouth moist and make eating easier. Some examples are: Optimoist®, Oasis Moisturizing mouthwash®, Oral Balance Gel®, Xylimelt® lozenges, or Salivart®. These are found at most drug stores and do not require a prescription. Your doctor may also be able to prescribe medicines for dryness. Please talk with your doctor if you feel this would be helpful. However, be aware that not all insurance plans pay for these products.

Depending on where the radiation is being directed, problems with dry mouth may be short-term or permanent. Ask your doctor how long you should expect it to last.

Mouth Sores
Depending on the area being treated, and if you are getting chemotherapy, you may develop some sores in your mouth. These sores may be painful and make it difficult to eat. It is important to keep your mouth clean so that the sores do not get infected. Brush your teeth, gums and tongue after every meal with an extra soft toothbrush. If brushing hurts, soften the bristles in warm water. You can use the special fluoride gel prescribed by your dentist. Floss your teeth gently every day. Rinse your mouth several times a day. During treatment, many patients find the following rinse is soothing to their mouth:

SALT & SODA
Mix ½ teaspoon salt, 1 tablespoon of baking soda, and 8 oz. of tepid water.
Use this mixture to clean your mouth after every meal. Follow with a plain water rinse.

Avoid using toothpaste or mouthwash made with alcohol, as they can be painful to mouth sores. Avoid high-acid foods, such as tomatoes, citrus fruits, and juices, as well as spicy foods. Try bland, soft foods that will not sting your lips or mouth.

If your mouth does become sore and makes it hard to eat, let your doctor or nurse know. Your doctor can prescribe some medicine to help relieve the pain.

Taste Changes
During your treatments, you may find that foods no longer taste the same. Starting the second week, it may not taste as good, or may start tasting bad. During the third week, food may not have any taste at all. This is temporary, but may last for several months after treatment is completed.

Loss of Appetite
You may not feel like eating during your treatment for many reasons. You may:
- Be full after eating very small portions.
- Have nausea or vomiting and not feel like eating at all.
Not eating can lead to weight loss, weakness and fatigue, which can make it difficult for you to perform your usual activities. If you have nausea, let your doctor or nurse know. Your doctor can prescribe medicine that you can take before meals to help relieve your nausea. If cooking odors bother you, eat foods that are lukewarm or room temperature.

If you find that you become full quickly, try eating 5 or 6 small meals instead of 3 larger meals during the day. **Try to avoid drinking liquids 30 minutes before you eat and try not to drink with your meals.**

Try to eat high-protein, high-calorie foods, such as cheese, whole milk, yogurt, eggs, puddings and ice cream. Your doctor or nurse may suggest a diet supplement, such as Ensure® or Boost® for added extra calories and protein. If you would like more diet information during treatment, your nurse can give you some suggestions or refer you to a dietitian.

**Sore Throat**

When radiation is directed at your neck and upper chest, it can cause a sore throat or esophagitis. Esophagitis is an irritation of the lining of the tube that connects your mouth with your stomach (esophagus). This may cause:

- A burning feeling similar to heartburn.
- Discomfort or pain when you swallow. Or you may notice that food feels like it sticks in your throat as you swallow.

If you find that your throat is so sore that you are unable to eat your usual foods, tell your doctor or nurse. Your doctor may prescribe medicine to help to relieve the pain. Take this medicine 30 minutes before meals.

Try to eat foods that are high protein, high calorie, soft, and bland, such as mashed potatoes, yogurt, eggs, ice cream, applesauce, and pudding. The following may irritate your throat and may be painful to eat so it is helpful to avoid:

- Foods with sharp edges, such as chips, pizza crust, dry toast, or crackers.
- Hot liquids, spicy foods.
- Foods that are high in acid and alcohol.

If you need some suggestions about which foods to try and which to avoid, ask your nurse.

**Fatigue**

Fatigue is a common side effect but varies with each patient. Stress about your illness, daily trips for treatment and the effects of radiation on normal cells may make you more tired.

Fatigue often begins after 10 treatments. It is often worse at the end of the week but seems to improve over the weekend. It may last several weeks to several months after your treatment has ended.
Plan activities early in the week, when energy levels are higher. Try to keep regular hours, getting up at the same time 7 days a week. Try to keep active and exercise if you can. It is important not to overexert yourself. If you become tired, plan for rest periods during your day.

**Health Information Resources**
For more information, visit Northwestern Memorial Hospital’s Alberto Culver Health Learning Center. This state-of-the-art health library is located on the 3rd floor of the Galter Pavilion. Health information professionals are available to help you find the information you need and provide you with personalized support at no charge. You may contact the Health Learning Center by calling 312-926-LINK (5465) or by sending an e-mail to hlc@nm.org.

For additional information about Northwestern Medicine, please visit our website at nm.org.