Radiation Therapy to the Spine

For two or more weeks you will receive radiation therapy to your spine. Radiation may be given to the cervical, thoracic, or lumbar spine.

One of the major concerns that patients have is how to manage the side effects of the treatments. Common side effects are skin irritation and fatigue.

Patients who receive radiation to the **cervical spine** may also have a sore throat and problems swallowing.

Patients who receive radiation to the **thoracic spine** may have a sore throat, problems swallowing, nausea and esophagitis.

Patients who receive radiation to the **lumbar spine** may have nausea or diarrhea.

Most side effects begin about 10 days to 2 weeks after treatments start. They can last for 2 to 4 weeks after treatments end. You may have some or all of these side effects. They may occur all at once or at different times. This handout will explain how to care for yourself. You should discuss these symptoms with your doctor or nurse.

**Positioning for Your Treatment**

Each day, right before your treatment, you will be asked to get into position on a treatment table. Some patients are put into “molds.” These molds are made during the treatment planning stage.

Tiny dots or marks may also have been put on your skin. These marks relate to your treatment field. If these marks fade, they will be re-marked. After your radiation therapy is complete, you can allow the marks to fade. You can also gently remove them using soap and water or baby oil. These marks may rub off on your clothes. If this happens, spray the stains with hair spray or Spray'N'Wash® before you wash your clothes.

**Radiation Skin Reaction**

Most radiation goes through the skin into body tissues. Even so, the skin in treatment sites can become red and irritated. It can also become dry and itchy. Sometimes, the skin will peel and become moist. This happens most often in skin folds and curves. We will tell you which sites to watch.

Watch your skin closely and report any changes. Use the skin care products as directed. We will watch your skin reaction closely. We may tell you to change the way you care for your skin as it may be painful. Tylenol® or ibuprofen should help. If you
need something stronger or help with skin care, let us know.

Skin Care During Treatment
Follow the guidelines in this handout during and after your treatment, until your skin is fully healed.

1. You may bathe or shower using lukewarm water. If you need soap, use one that is meant for dry or sensitive skin such as Aveeno®, Dove®, Basis®, Neutrogena®, Cetaphil® or Ivory®. Rinse skin well and gently pat it dry. Do not rub the skin in treatment fields.

2. Avoid heat. Do not use heating pads, very hot water in the bath or shower, or hot water bottles.

3. Avoid cold. Do not allow the skin to become chilled from ice or very cold water or air.

4. Avoid sunlight or sunlamps on the treatment site. When you are outside, keep the area covered with clothing. If clothing does not cover the entire area, use a sunscreen with SPF of 30 or higher.

5. Avoid rubbing or scrubbing the skin in the treatment site. Wear loose, cotton based clothing that will allow good air flow. Avoid clothing made of nylon or synthetics. These fabrics tend to hold moisture next to the skin. Clothes that bind can irritate the treated skin.

6. Avoid tape on the treated skin.

7. Do not apply anything to the treated skin unless approved by your doctor or nurse. This includes bath oils, perfumes, talcum powders, and lotions. If we expect a skin reaction, we will suggest a skin moisturizer. Use it each day as instructed.

Remember: Your skin needs to be clean and dry before each treatment. You can apply lotions and creams 2 – 4 times per day to help your skin feel better. Do not apply lotions or creams 1-2 hours before your treatment. If your treatment is late in the day, you may apply a skin product if it will

Feeling Tired
Feeling tired (fatigue) during radiation treatment is a common side effect. Fatigue does not mean that your tumor is getting worse. Some people feel no fatigue and can keep up with their normal routines. Others need to take an extra nap each day. Some change their routines, working only part time. Others don’t do anything that requires a large amount of energy. Fatigue can begin right away, or it can occur after 1 – 2 weeks of treatment. It can go on for a few weeks to months after treatment has ended. Rarely, it can last for up to a year.

Low blood counts may also cause you to feel tired. Your bone marrow makes blood cells. If a lot of bone is in your radiation field, your body may produce less blood cells. This is a short-term side effect. Your doctor may order a blood test from time to time to check your blood cell counts.

Tips for Dealing with Fatigue
1. Listen to your body and rest when you need to. A short nap during the day or sleeping a little longer may help.
2. Make time for hobbies you enjoy. Take a walk in the fresh air, visit with a friend, or pursue a hobby during the times that you have the most energy. Do things that help you feel good.

3. Stop smoking and do not drink alcohol to excess. Do something healthy for yourself. If you need help, talk with your doctor or nurse. There are ways we can help you.

4. If you work, you may want to keep working. Some people are able to maintain a full-time job. Others find it helpful to work fewer hours. Many employers will agree to part time work. We can schedule your treatment times to fit in with your work schedule.

5. Plan regular active exercise – daily walks, riding an exercise bike, or any mild exercise. Go at your own pace. Never exercise to the point of fatigue. You should feel less tired after the exercise than you did before the exercise.

6. Find ways to deal with your emotions. Pent-up emotions can add to fatigue. Talk with family or friends. Having a good cry or laugh can be helpful.

7. Eat well. Keep foods around that need little effort to prepare – cheese, yogurt, or slices of meat. When you feel well, prepare and freeze meals to eat later when you are tired. You need extra calories and protein to maintain energy and repair normal skin cells while getting treatments. Speak with a clinic nurse if you have problems eating.

8. Drink at least 8 to 12 glasses of fluid per day. The water will help to flush some of the by-products of your treatment out of your body.

9. If you need help with your basic daily needs, ask your nurse or the social worker to help you contact your local resources. You may be able to receive help with meals, housekeeping, personal care, transportation, support groups, and respite care.

10. Accept help from family and friends. If friends ask if they can help, accept it! If they ask you to call if you “need anything,” they may need ideas from you. Often people want to help but don’t know what things you need help with. Things like mowing the lawn, making meals or watching the kids, can help both you and your friends to feel good.

11. Visits from family and friends can be pleasant, but also tiring. You do not need to be the perfect host or hostess. Let friends and family fix dinner and get the drinks and snacks for you!

12. Some people may have pain from cancer or other causes. Pain can be very tiring. Your doctor and nurse can work with you to achieve good pain control. Let them know about any pain you have during treatment.

Pain
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**Sore Throat**
Rinse your mouth often to keep it moist. Use a mouthwash made with salt and water. Mix: 1/4 tsp salt in 8 oz of water or 1 tsp salt in 1 quart of water.

Avoid mouthwashes that contain alcohol such as Scope®, Cephacol®, and Listerine®.

Avoid smoking and drinking alcohol.

Avoid or dilute citrus juice. Orange, grapefruit, lemon, and lime juices are slightly acidic. Try foods that are low in acid such as bananas or canned fruits.

Foods at room temperature or slightly chilled are more soothing to the throat.

Sometimes the throat can become painful. The pain can interfere with eating. It is important that you keep eating. Discuss this with your doctor or nurse if it occurs.

**Problems Swallowing**
Try to eat soft moist foods. Foods such as mashed potatoes, scrambled or poached eggs, cooked cereals, puddings, gelatin, and macaroni may be easier to swallow. Cut food into small pieces. Avoid rough or coarse foods such as hard breads, raw vegetables, toast, pretzels and chips.

Use liquids, gravies, or sauces on food to help it slide down the throat.

Eat smaller amounts of food more often. Sometimes 4-6 smaller meals each day are better than 3 larger meals.

**Nausea**
Radiation to the thoracic spine can cause nausea and vomiting. You need to eat. Food provides energy and strength. Talk with your doctor or nurse. We may be able to prescribe helpful medicines.

Try eating small amounts of salty foods like chicken soup, saltine crackers, pickles, or olives. If your mouth is not sore, you may also want to try tart foods such as lemons. Eat low fat foods and avoid fried foods.

Drinking small amounts of clear, cold drinks such as apple juice.

Try cool foods such as Popsicles®, gelatin desserts, yogurt, cottage cheese, cheese, deviled eggs, and cold meats.

Relax, eat slowly, and chew your food well. Eat small meals (4-6 per day).

The smell of cooking sometimes can cause nausea. Avoid cooking the food yourself.

If you have nausea during treatment, avoid eating one to two hours before treatment and one to two hours after treatment.

**Esophagitis**
If the esophagus is in the treatment field, you may have burning in the throat, which feels like heartburn. You may notice a lump in your throat when you swallow.

Antacids sometimes help to coat and protect the esophagus. Ask your doctor before you begin using an antacid.

Sometimes pain medicine is needed. If you have pain that prevents you from eating or swallowing, talk with your doctor or nurse.

**Diarrhea**
Diarrhea can occur with radiation to the abdomen. This is because the lining of the bowel is very sensitive to radiation. How severe diarrhea becomes depends on the amount of bowel in the radiation field. It also depends on the total dose of radiation. Diarrhea most often begins during the 3rd or 4th week of treatment.
If you do not have diarrhea, you may keep eating your normal diet. Try to eat foods high in protein such as meat, fish, milk, cheese, eggs, and peanut butter.

If you do get diarrhea, let us know. You may need to take some medicine. Decrease the amount of fiber and fat in your diet. See Health Facts for You #323 Eating Hints to Help with Diarrhea. Drink at least 8-12 glasses of liquids per day.

**Food Supplements**
Liquid or powdered food supplements add protein and calories to your diet. These can be found in grocery, drug, and health food stores. Some brand names include: Carnation Instant Breakfast®, Boost®, Ensure®, Sustacal®, Osmolyte®, Skandi-Shake®. If you have diabetes, choose Glucerna® or Choice® products.

GNC (a health food store) also carries a supplement called Gainer’s Fuel®. Many stores carry generic brands of these supplements. Canned liquid supplements are easy to use. Just pop the can and drink. Powders can be mixed into fluids or foods.

**Other Concerns**
Cancer can affect many areas of your life. It can affect your emotions, marriage, family, jobs, finances. You may also feel concerned about your future. The nurses and social workers can help you cope.

**Who to Call**
Radiation Oncology Clinic
8 am – 5 pm
(608) 263-8500

Ask to speak to a nurse. If the clinic is closed, your call will be sent to the paging operator. Give your name and phone number with the area code. The doctor will call you back.

**Cancer Resource Services**
Cancer Connect is a service of the UW Comprehensive Cancer Center. The staff can answer your questions about local treatments. Cancer Connect has knowledge of community resources and support services. The number is (608) 262-5223.

Cancer Information Service has information about cancer care around the country as well as locally. The toll-free number is 1-800-422-6237.

Your health care team may have given you this information as part of your care. If so, please use it and call if you have any questions. If this information was not given to you as part of your care, please check with your doctor. This is not medical advice. This is not to be used for diagnosis or treatment of any medical condition. Because each person’s health needs are different, you should talk with your doctor or others on your health care team when using this information. If you have an emergency, please call 911. Copyright © 3/2020. University of Wisconsin Hospitals and Clinics Authority. All rights reserved. Produced by the Department of Nursing. HF#4418