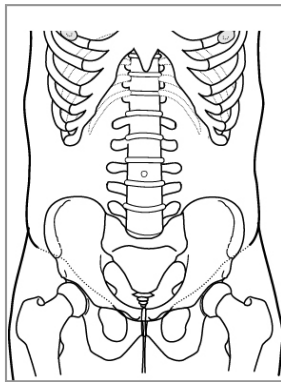


## Radiation Therapy to the Abdomen

You will have 4-8 weeks of radiation treatment to the abdomen. Some common side effects include nausea, diarrhea and fatigue. If the pelvis is also treated, you may also have rectal and bladder irritation. Side effects can begin 2-3 weeks after the treatments start. They last for 2-4 weeks after the treatments end. Nausea can occur any time during the treatment course.



### Positioning for Your Treatment

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

Tiny dots or marks may also have been put on your skin. Permanent marker is used for these marks. These marks relate to your treatment field. They look like tiny freckles and will not be easy to see. Markers may be used to make these marks.

If these marks fade, they will be remarked. After your treatment is finished, 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.

### Skin Reactions

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. The radiation therapists will tell you which sites to watch.

Watch your skin closely and report any changes. Use the skin care products as directed. As you start to get a skin reaction, we will watch it closely. We may tell you to change the way you care for your skin.

Some skin reactions can be painful. Tylenol® or ibuprofen is often helps. If you need something stronger or help with skin care, let us know.

### Skin Care During Treatment

Follow our guidelines during your treatment and afterwards, until your skin has fully healed to protect your skin.

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

Avoid heating pads, very hot water in the bath or shower, and hot water bottles.

Avoid cold. Do not expose the skin to ice or very cold water or air.

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

Do not rub or scrub the treated area. Wear loose, cotton based clothing that will allow good air flow. Avoid clothing made of nylon or synthetics because they hold moisture next to the skin. Clothes that bind can irritate the skin.

Do not use tape on skin in the treated area.

Do not apply anything to the treated skin unless approved of by your doctor. If we expect that you will have a skin reaction, we will suggest a skin moisturizer. Use it each day as instructed.

Your skin needs to be clean and dry before each treatment. You can apply lotions and creams 2-4 times per day to make your skin. If your treatment is late in the day, you may apply a skin care product if it will be fully absorbed by your treatment time.

### **Skin Care After Treatment**

Late effects are rare. These late effects may occur months to years after treatment. Treated skin may still be dry, darken or become firm and tough. Skin moisturizer or vitamin E oil may help.

The skin in treatment areas may always be extra sensitive to sunlight. When outdoors, use a sunscreen of SPF 30 or higher on treated skin exposed to the sun. Treated skin is at higher risk for skin cancer.

### **Diarrhea**

Radiation to the abdomen can cause diarrhea. The lining of the bowel is very sensitive to radiation. Not all patients will have diarrhea. Diarrhea most often begins during the 3rd or

4th week of treatment and may last for two weeks after treatment.

If you **do not** have diarrhea, you may eat 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. We may tell you to change your diet or take some medicine, such as Imodium®.

### **Diet**

- Decrease the amount of fiber and fat in your diet.
- Avoid foods that cause gas or cramps such as beans or cabbage.
- Drink at least 8-12 glasses of liquids per day to replace fluids lost.
- Eat foods rich in potassium such as bananas, cantaloupe, tomato juice, and orange juice (pulp-free).
- Eat foods rich in protein such as meat, fish, cheese, peanut butter, and milk products.
- See *Health Facts for You* #323 for eating tips to help with diarrhea.

### **Food Supplements**

Food supplements add protein and calories to your diet. You can find them in many stores.

Some brand names include: Carnation Instant Breakfast®, Boost®, Ensure®, Sustacal®, Osmolyte®, and Skandi-Shake®.

If you have diabetes, choose Glucerna® or Choice® products. GNC (a health food store) also carries a supplement called Gainer's Fuel® by Twinlab.

Many stores carry generic brands of these supplements. Canned liquid supplements are easy to use. Just pop the can and drink. You can mix powders into fluids or foods.

### **Rectal Irritation**

If your pelvis is in the treatment field, you may get a sore rectum. This is a short-term side effect. The lining of the rectum is very sensitive to radiation. Diarrhea may make rectal irritation worse. If you have had hemorrhoids, they may get worse or flare up during treatment. Rectal symptoms include burning, itching, and small amounts of bleeding. These symptoms can occur both inside and outside of the rectum.

Rectal symptoms may be mild. They may also be severe and require treatment. Hemorrhoid medicines with hydrocortisone (Preparation H®, Anusol HC®, or generic) may relieve rectal symptoms. Talk to your doctor about your rectal symptoms.

### **Bladder Irritation**

Bladder irritation (cystitis) is a swelling or soreness of the bladder lining. It is a short-term side effect. Symptoms include feeling as if you need to urinate all of a sudden or feeling as if you need to urinate often. It can be signaled by burning or pain on urination.

Tell your doctor or nurse if you have any bladder symptoms. Drink plenty of liquids. Bladder symptoms may also be a sign of an infection. You may be asked to provide a urine sample. Sometimes, medicine is prescribed for bladder irritation.

### **Nausea**

Treatment can cause nausea and vomiting. Some patients reduce their intake or stop eating to avoid these symptoms. We don't suggest you do that. Your body needs food to

heal and rebuild normal tissue damaged by the treatment. Food also gives you energy and strength to help you complete your treatments. Tell your doctor or nurse if you have nausea or vomiting. Often, we can help you control these symptoms.

### **Tips:**

- Eat small amounts of salty foods such as crackers or pretzels.
- Drink **small amounts** of clear, cold drinks such as 7-up®, ginger ale, and caffeine-free cola. Avoid drinking large amounts, as this can cause gas.
- Try **cold 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).
- Avoid eating 1-2 hours before and after treatment.

### **Feeling Tired**

Feeling tired (fatigue) during treatment is common. Fatigue does not mean that your tumor is getting worse. Some people feel no fatigue and are able to keep up with their normal routines.

Fatigue can begin right away, or it can occur after 1-2 weeks of treatment. It can go on for several weeks to months after treatment has ended. It will rarely last 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 make less blood cells. This is a short-term side effect. Your doctor may order blood tests to check your blood cell counts.

Listen to your body and rest when you need to. A short nap during the day or sleeping a little longer may help.

Make time for activities 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.

Stop smoking and do not drink alcohol to excess!

Do something healthy for yourself. If you need help with this, talk with your doctor or nurse. There are ways we can help.

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 understand and will agree to part-time work. We can schedule your treatment times to fit in with your work schedule.

Plan regular active exercise. Take daily walks, ride an exercise bike, or do 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 it.

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

Eat well. Keep foods around that need little effort to prepare – cheese, yogurt, or slices of meat. When you feel well, cook and freeze meals to eat later when you are tired. You need extra calories and protein to maintain energy while getting treatments. It will also help repair normal skin cells damaged by your treatment.

Speak with a clinic nurse if you have problems eating.

Drink lots of fluid, 8 to 12 glasses per day. Water will help to flush some of the by-products of your cancer fighting treatment out of your body.

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

Accept help from family and friends. 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 the most help doing.

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

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

### **Fertility**

Radiation to the pelvis (the area between your hips) can affect sexual and reproductive functions.

**Women:** Women who have radiation to the pelvis may stop menstruating. They may also have symptoms of menopause. Treatment can also cause vaginal itching, burning, and dryness. Report these symptoms to your doctor.

A woman in childbearing years should discuss birth control options with her doctor. You should not become pregnant during treatments. If you are pregnant before starting radiation treatments or suspect you may be, please tell your doctor right away.

**Men:** Radiation to the pelvis can reduce both the number of sperm and their ability to fertilize. You will still need to use birth control as you could still conceive a child. Discuss your concerns with your doctor.

### **Sexuality**

Your sex drive may decrease. It will likely return when the treatment ends. It helps to tell your partner your needs and feelings. If you have questions or concerns, talk to your doctor.

**Women:** You may have sex throughout your treatment unless your doctor tells you not to. Sex may become painful due to the shrinking and the drying of vaginal tissues. Vaginal lubricants and changing positions during sex may help. Your doctor may suggest using a vaginal dilator to prevent vaginal tightness. Your nurse will tell you how to use it.

Radiation to the pelvis causes the ovaries to stop working. If you have not gone through menopause, you will do so at this time. You may or may not have symptoms of menopause. Symptoms may include: hot flashes, mood changes, vaginal dryness, tingling, and insomnia. Your doctor will talk with you about ways to manage these symptoms which may include hormone replacement therapy.

**Men:** You may have trouble getting or keeping an erection (impotence). Most of the

time, this is a short-term side effect. Rarely, it can be a permanent side effect. Talk to your doctor about any questions or concerns.

**Both men and women:** Radiation can cause a pubic hair to thin. It begins about 2-3 weeks after treatment has started. It can be a short term or permanent side effect. How long this side effect lasts depends on the total dose given.

### **Other Concerns**

Cancer can affect many areas of your life. Patients feel its impact on their emotions, marriage, family, jobs, finances, thoughts and feelings about the future. The nurses and social workers can help you cope with these issues. They can suggest support services and resources. Feel free to speak to them at any time.

### **Cancer Resources**

There are many resources for cancer patients and their families.

**Cancer Information Service** is a nationwide telephone service. It has information about local cancer care as well as around the country. The toll-free number is **1-800-422-6237**.

### **When to Call**

Call if you have questions or concerns.

### **Who to Call**

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

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

If you are a patient receiving care at UnityPoint – Meriter, Swedish American or a health system outside of UW Health, please use the phone numbers provided in your discharge instructions for any questions or concerns.

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#4556