

St. Patrick Hospital and Health Sciences Cancer Center

**IMPORTANT INFORMATION AND INSTRUCTIONS
FOR PATIENTS RECEIVING RADIATION THERAPY
TO THE PELVIS**

Your doctors have recommended radiation treatments to the pelvis area. The number and exact location of these treatments will be determined by your radiation oncologist. This hand out will acquaint you with some of the side effects associated with treatment to the pelvis. Normal tissues included in your treatment fields may be affected by the radiation and therefore undergo some temporary or permanent changes. Some of the information that follows describes how to manage and cope with many side effects that may occur.

The chance that radiation therapy will be effective in treating your tumor depends on a number of factors. Probably the most important two factors are the kind of tumor that you have and the stage, or amount, of disease. As with any type of medical treatment, radiation therapy does not always work and there is a chance that these treatments may not help you. Your doctor will discuss these possibilities with you, but, if you have further questions do not hesitate to ask your doctors or nurses.

Again, side effects listed below do not occur in all patients. They are changes that MIGHT happen during radiation therapy and may range from mild to severe. Because each case is unique, there may be some additional short and long-term side effects that your doctor will discuss with you. Whenever you have questions or concerns, please bring them up to your physician, radiation therapist or nurse.

APPETITE CHANGES

☞ Explanation: Sometimes appetite changes occur during radiation therapy or they may already be present due to the disease itself and/or other treatments. Nutrition, however, is an important part of your therapy and we recommend you maintain your present weight.

⊗ Characteristics: You may notice that you never feel hungry.
You may become full quickly after only a small amount of food.
You may notice foods tasting or smelling different, flat or unpleasant.
You may feel nauseated and/or vomit.

⊙ Solutions/Resources: The staff will have suggestions and handouts to help you maintain the best possible nutritional status or to help with symptoms.

FATIGUE

☞ Explanation: Some patients develop a decrease in energy levels or actual fatigue from their radiation treatments. This varies from patient to patient. Your body is using energy to fight cancer cells and/or to repair normal cells and tissues. Causes of fatigue are varied and can be due to your cancer, blood counts, nutrition and prior or current treatments.

☺ Characteristics: You may experience fatigue that builds up toward the 2nd week of treatment and then stabilizes. This fatigue may persist for several weeks after you have finished your radiation treatments.

☺ Solutions/Resources: Be sure to get adequate rest, balance your activities and try to exercise regularly.
Eat a balanced and nutritious diet.
Take naps, as necessary.
Try to maintain a positive attitude towards your therapy.
Do not expect immediate resolution of your fatigue when treatment stops.
It may take weeks or months to return to "your old self."

SKIN CHANGES

☞ Explanation: The skin over your treatment field may become reddened, itchy or tender after several weeks of treatment. At the end of treatment, your skin may appear tanned and there could be some peeling. The area may feel firmer or fuller than surrounding skin due to temporary fluid accumulation. This fluid accumulation will most likely resolve without any treatment after a few months. Over time, the tissues under the skin may become more firm (fibrosis). DO NOT remove marks made on your body by the physician or radiation therapist unless specifically told to do so. Always protect against sunburn. Use products with at least a SPF of 15, or greater.

The skin in the involved area will be more sensitive to sun exposure.

☺ Solutions/Resources: Avoid lotions or creams to the skin over the treatment field unless approved by the staff.
The nurse may give samples or suggest preparations you can use. Currently, we are recommending AQUAPHOR ointment. You may also use 100% aloe vera gel.
Use mild soaps (e.g., Eucerin, Liquid Olay soap, or Dove) if any.
Wash gently and pat dry.
Small, blue tattoos (the size of a freckle) will be placed to locate your treatment area once your treatments are underway. These tattoos are small permanent records on your skin as to where you

received radiation treatments.

Do not shave in the treated areas, unless you use an electric razor.
Do not use hot water bottles or heating pads in the treated area.

Do not wear tight fitting apparel that may rub or irritate the treated area.

HAIR LOSS

Explanation: Hair loss related to your radiation treatments occurs only in the areas within the treatment fields. For pelvic radiation, this can be pubic hair and buttock hair. Hair loss generally begins 2 to 3 weeks into your treatment course and re-growth usually begins 3 to 6 months following the completion of your radiation treatments. Occasionally, the hair does not grow back.

GAS FORMATION

Explanation: It is possible that radiation directed to the pelvic area can cause gas formation. This gas formation may cause cramping that may proceed the development of diarrhea in some patients.

⊗ Characteristics: You may experience increased burping or flatulence.
You may have a feeling of fullness in the stomach or bloating.

⊙ Solutions/Resources: The staff has suggestions and handouts for diet measures that will explain about avoiding gas forming foods, eating smaller meals more often.
Wearing loose, non-constricting clothing will help with discomfort due to gas formation.

BOWEL CHANGES

Explanation: Radiation treatments directed toward the pelvis area can cause some irritation to the bowels if you are going to experience bowel changes from your radiation treatments, it usually begins after your second week of treatment, although it can occasionally occur later or earlier in your treatment course.

If you are already on bowel stimulants or laxatives for constipation, tell a staff member. They may discontinue those medications if you develop loose stools or diarrhea. If you continue to have problems with your bowels in the months following your addition treatments, please call the Cancer Center.

⊗ Characteristics: You may experience increased frequency of bowel movements and looseness of bowel movements (diarrhea).

⊗ Solutions/Resources: The two most effective things that can be done to relieve diarrhea are taking the medication and following the *Low Residue Diet*.

The staff can provide you with handouts explaining a *Low Residue Diet*. This diet will eliminate high fiber and fatty foods.

For actual diarrhea, medication can be prescribed for relief. *Imodium* is the most common drug prescribed for diarrhea. You will have to adjust the amount of your medication to your individual needs. Most patients take 2 tablets per day, one in the morning and one at night. Extra tablets are to be taken as needed. Do not take more than 8 tablets per day without your physician's permission.

Be sure to check with the physician or nurse before using any bowel stimulants or laxatives.

For cleaning, alcohol free baby wipes instead of toilet paper is suggested.

❖ Report to Physician or Nurse: Passing more than 4-5 loose stools per day.
Watery, diarrhea stools.

ANAL IRRITATION

⊗ Explanation: Occasionally, patients undergoing pelvic radiation will experience anal irritation or aggravation of pre-existing hemorrhoids. This is more often related to diarrhea or frequent bowel movements than it is the radiation itself.

⊗ Characteristics: You may notice pain and burning during bowel movements that increases with the number of stools.
You may begin to experience pain and burning between bowel movements.

⊗ Solutions/Resources: Because the majority of anal irritation is related to diarrhea, the control of any diarrhea you are having will improve anal irritation you are having as well. For cleansing following bowel movements use alcohol free baby wipes, wiping gently.
The staff may suggest you try an over-the-counter remedy such as Anusol or Preparation H to soothe the irritated tissues. **Please only do**

so with the staff's approval.

Warm sitz baths can be helpful in the relieving of burning.

The staff may also prescribe medications for you to relieve discomfort.

BLADDER IRRITATION

☞ Explanation: Sometimes, radiation to the pelvis may cause irritation to the bladder.

⊗ Characteristics: After a few weeks of treatment you may notice some burning when urinating.

You may notice the need to urinate more than usual.

You may notice symptoms similar to those associated with bladder infections.

⊙ Solutions/Resources: Drinking plenty of clear liquids will help keep your urine diluted so it is less irritating to your bladder.

The staff may prescribe medications to help alleviate the symptoms of bladder irritation. One of the drugs prescribed is called PYRIDIUM. It is important to know that this drug will color your urine a bright orange and is a normal side effect of the drug.

Due to differences in male and female pelvic anatomy, we have separated the possible side effects for each.

FEMALE PATIENTS:

☞ Explanation: As a women, you may experience changes or side effects in your reproductive organs.

The labia, or folds of the skin around the vagina, may develop more of a skin reaction than other areas. It is important this area be kept as clean as possible using warm sitz baths 1-2 times each day with gentle cleansing. Pat the area dry after each bath. To help keep the skin folds and area dry, wear only cotton underwear, whenever possible sit with the area exposed to the air. Using a fan or blow dryer on the "cool" and "low" setting will help keep this area as dry as possible. Women having pelvic radiation can expect to stop menstruating and may have other symptoms of menopause. You may experience hot flashes, emotional swings or palpitation.

It is likely that your fertility will be affected. This does not mean that conception can not occur. You will need to continue or alter your birth control practices accordingly. You will need to discuss these topics frankly with your physician prior to beginning your radiation treatments if

they are issues for you.

You may continue sexual activities throughout your radiation treatments unless it causes too much discomfort, causes bleeding or you have been advised by your physician to not do so. For vaginal dryness, we suggest using Replens, which are available at most drug or grocery stores. Occasionally, the vaginal area tightens following surgery and/or radiation treatments. If this may be the case for you we can instruct you in the use of a vaginal dilator which will decrease the amount of tightening you will experience over time. To use the vaginal dilator, lubricate it with K-Y jelly, insert and rotate the dilator. The dilator should remain in place for 10 minutes each day. This can be done in the tub while bathing. After use, wash with warm water and mild soap, rinsing thoroughly.

For sexual intercourse, you may want to use a water soluble lubricant such as K-Y jelly.

Please check with the staff about douching. Usually, patients use one (1) tablespoon of white vinegar in one (1) quart of warm water. If you find the vinegar irritating, use warm water only.

It is not unusual to have some slight blood streaking or discharge during treatment. If the amount of blood or the discharge change dramatically or increase, please let the staff know.

MALE PATIENTS

Explanation: As a male you may experience some side effects specific to your gender.

High doses of radiation can temporarily or permanently affect a man's libido or ability to have an erection. Occasionally some men will become impotent, but this is not generally the case.

For those men with large prostates, radiation may cause some swelling around the urethra, or tube that carries your urine from your bladder through your penis. This may cause you to urinate slower, have a smaller stream of urine or even may cause a complete blockage. If you notice a change in your ability to urinate, please let the staff know immediately. If you are not able to urinate at all, please immediately report to the nearest emergency room for care.

If radiation is given to an area that include the testes, there can be a reduction in the number of sperm and their ability to fertilize. This does not mean that conception can not occur and you will need to continue or alter your current birth control practices. It is important that your partner not become pregnant in the next year. Please discuss these issues frankly with your physician before beginning your radiation treatments.

LONG TERM SIDE EFFECTS/PERMANENT COMPLICATIONS

☞ Explanation: Any type of cancer treatment can result in complications that occur weeks, months or years following completion of treatment. Generally, late complications occur in less than 10% of patients receiving standard treatments.

As with most short term side effects, many long term effects affect body structures included in or adjacent to, the radiation treatment fields. Organs that are treated with pelvic radiation fields include bladder, bowel, rectum, reproductive organs and spinal cord. Skin, skin color changes and connecting tissues may be affected. Lymphedema or a permanent swollen extremity can occur. General effects of suppression of the immune system, endocrine system, arthritis, psychosocial complications and fertility problems may occur.

Any organ or tissue that is in the treatment area will be affected to a varying degree. The number of treatments, dose per day, total dose and techniques are calculated to try and reduce the risk of long-term damage. Your cancer may require treatment that may permanently affect tissues or organs. Your physician will discuss this with you.

Radiation therapy has been reported to increase the occurrence of new cancer. This is unlikely, however, if it happens it is usually after many years.

●* If there is any possibility that you are pregnant, it is important to inform your physician, nurse or radiation therapist immediately. If you or your spouse are considering pregnancy in the next year, please discuss this with your physician as soon as possible.

☺ The possibility that long term consequences may occur following cancer treatment is a major reason that regular, lifelong medical follow-up is essential. Your physician will discuss any problems that may be associated with your particular cancer or type of treatment.