

When you return to begin your treatments, you will meet the radiation therapists who deliver your daily treatments. Treatments are scheduled Monday through Friday. The exact number of treatments will be determined by your physician and is designed to best meet your specific treatment needs.

Radiation therapy is closed for certain holidays, and you will be notified if a holiday occurs during your course of treatment. Due to the number of patients under treatment and emergency hospital patients, there can be delays in the time of your daily treatment. We appreciate your patience.

Side Effects

At your initial consultation, your radiation physician reviewed the anticipated results and side effects of the radiation plan determined to best fit your needs. This handout is to acquaint you with some of the most common side effects that can occur because of your treatment. It will also explain some of the things that can be done to help manage these side effects.

It is important to remember that most people do not experience all of the side effects mentioned here. Please keep us informed of your particular needs so that appropriate recommendations can be provided for you.

Skin Reactions

Because radiation beams must penetrate the skin to reach the target area, most patients will experience some degree of acute skin effects in the area being treated. Often times this irritation can be limited to mild reddening. Other symptoms may include tender, dry, flaky skin and, on occasions, a rash-like appearance or moist, blistered skin can occur in more sensitive areas, such as behind the ears. The following suggestions are provided to help minimize a skin reaction during brain irradiation.

- You may wish to wash your hair with a mild shampoo. After the first several weeks, wash the hair and scalp with warm water only and pat dry with a soft towel. Do not use a hair dryer.
- In order to protect your scalp from exposure to the sun, wind, or cold, you may wish to wear a wig, hat, turban, or scarf during the treatment period.

- We recommend avoidance of scalp/hair follicle irritants during cranial radiation (i.e., hair dyes, curlers, curling irons, teasing, harsh shampoos).
- Hydrocortisone ointment may be used in areas of excessive itching. Your preferred antibiotic ointment can be used behind the ears or other areas of any skin blistering.

For further instructions on special care of your skin, our clinical staff will be glad to review skin care specific to your needs.

Hair Loss

Hair is not affected by radiation unless it is in the treatment field. Some things you should understand about hair loss during radiation including the following:

- Hair loss generally begins approximately 2 to 3 weeks after the first radiation treatment.
- Hair loss only occurs in the direct entrance or exit path of the x-ray beams (i.e., total scalp hair loss with whole-brain radiation; partial scalp hair loss with partial-brain radiation).
- Hair loss is most often temporary but can be permanent depending upon the dose of radiation delivered and the individual sensitivity of your hair follicles.
- Hair regrowth may take 3 to 6 months and may regrow differently from your usual hair color or consistency.

Fatigue

Fatigue associated with radiation therapy to the brain may occur and varies in severity from one individual to another. The tiredness develops gradually over several weeks and will subside gradually after completion of the treatment. It may be minimized by pacing your activities to avoid becoming overtired. Regular exercise, such as a short daily walk, and maintaining your strength and weight by eating a well-balanced diet are important and encouraged.

Steroid Medications

While you are receiving radiation therapy, a steroid medication may be prescribed for you. This medication is helpful in controlling swelling and inflammation caused by the tumor or your treatment. The following information concerning steroids is important to know and follow:

- Steroids can cause a wide range of side effects. These can include an increase in appetite, fluid retention (swelling), leg weakness, sleeplessness, and mood changes. Our clinical staff can provide you with information that will review steroids in greater detail.
- Take steroids with a snack or meal, as they can be irritating to the stomach lining.
- **DO NOT** increase or decrease the dosage of steroids that you are taking unless instructed to do so by our clinical staff.
- **DO NOT** abruptly stop steroids. When a dose reduction is planned, a slowly decreasing schedule will be provided for you, and it will be reduced and discontinued over several days to weeks.

Hearing Changes

If the middle ear is within the treatment field, hearing changes may occur. The decrease in hearing is usually a result of accumulation of fluid in the middle ear, hardening of ear wax, or both.

Some patients have noted benefit with the use of a decongestant, such as pseudo-ephedrine. Consult with our clinical staff to see if this would be appropriate for you.

- Do not use foreign objects for itching or irritated ear canals. Our clinical staff can provide anti-inflammatory drops if needed.
- Occasionally ear infections can occur, and we may need to have you see an Ear, Nose, and Throat physician if symptoms persist.

Post-Treatment Somnolence

This is an uncommon phenomenon, generally occurring in children. Patients experience excessive sleepiness, apathy, or mild generalized headache beginning 4 to 12 weeks after completing brain irradiation. This can last 2 to 8 weeks in duration. Phone contact with our clinical staff would be indicated to make sure this is not somehow related to progression of your underlying disease.

Post-Treatment Hormonal Effects

Because brain irradiation can include treatment to the hormone-producing areas of the brain, patients may experience decreased production of various hormones following treatment.

- This generally occurs slowly over 5 years in adults.
- You should report changes in cold intolerance, fatigue, blood pressure, menstrual cycles, or urinary and bowel habits to your primary care physician so that appropriate blood tests can be obtained if indicated.

Blood Counts

If you are receiving chemotherapy during your radiation treatments, your medical oncologist will be checking your blood counts periodically during your treatment.

NOTE: Please inform our clinical staff if your chemotherapy is being held due to low blood counts.

While Receiving Radiation

You will have scheduled visits with our clinical staff at least one time per week during treatment. We will be assessing your progress and making recommendations to you on changes in your care program as needed. Our clinical staff will be available at any time if you have questions or concerns that need to be addressed between these scheduled weekly visits.