

# JUST THE FACTS TREATMENTS & OPTIONS AVAILABLE

## Zapping a Few Myths

### The Truth About Radiation Therapy

Such are the fears and misconceptions about radiation therapy, that some men with prostate cancer avoid this potentially lifesaving treatment completely. In fact, a 2006 study conducted by the Istituto Nazionale dei Tumori in Milan, Italy, found that as many as 90% of men offered radiation therapy believed at least one common myth about the treatment.



By Neil F. Mariados, MD  
Board-Certified Radiation Oncologist

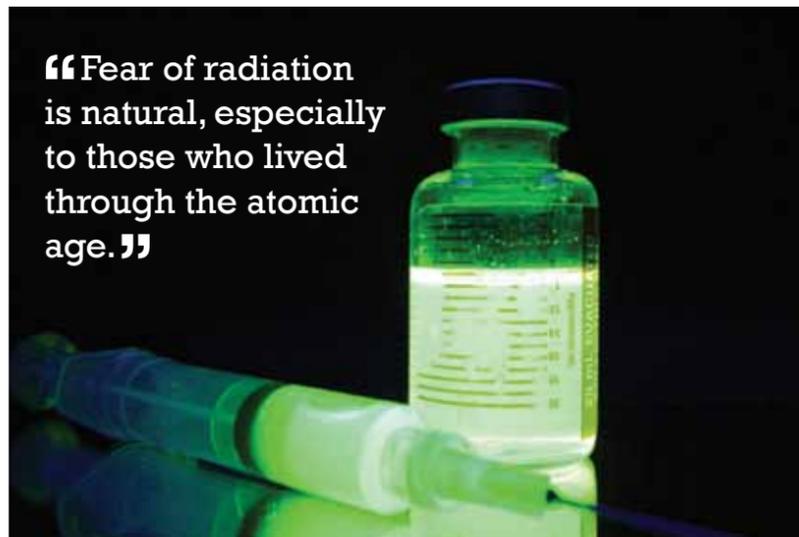
We'll lay some of these myths to rest in this article. The bottom line is that radiation therapy—whether external or internal—is a safe, widely used, and very effective way to treat a tumor. But if you do have concerns, it's important that you talk to your physician and ask him or her to describe the treatment, its possible side effects, and alternative treatment options.

Fear of radiation is natural, especially to those who lived through the atomic age and who learned of the effects of atomic bombs in World War II or know of the panic caused by nuclear power plant accidents. But radiation sickness and its lingering effects are caused by massive or long-term whole body doses of radiation, whereas therapeutic doses, though quite large, are targeted only at a tumor.

There are generally two different radiation treatment options for cancer:

In **external beam radiation therapy**, high-energy beams from a machine outside of your body are focused only on a particular area to avoid irradiating surrounding tissue. To minimize side effects, the radiation is given five days a week for several weeks, and you receive radiation during each session for just one to five minutes.

**Internal radiation therapy**—also called “brachytherapy”—places radioactive “seeds” inside your body very near a tumor. There are three kinds of implants. Low-dose rate (LDR) implants stay in place for one to seven days, whereas high-dose rate (HDR) implants stay in for just 10 to 20 minutes at a time and are then taken out. You might have HDR treatment either daily or weekly. Permanent implants remain in your body, but their radioactivity weakens over time.



“Fear of radiation is natural, especially to those who lived through the atomic age.”

#### FIVE MYTHS ABOUT RADIATION THERAPY

##### Radiation therapy is painful

*No. Patients have little or no sensation of radiation when an external beam machine is delivering the treatment. It's possible the skin in the area being treated will become dry or itchy, but this usually only causes mild discomfort that soon goes away.*

##### Radiation therapy makes a patient radioactive

*In external radiation, this is not true at all (i.e., it won't make you glow in the dark!) You receive an instant dose, and there is no lingering radiation once the machine is turned off. For brachytherapy, this is true to a point—that is, as long as implants are inside you and delivering a dose. When you first receive permanent implants, you will be asked to stay away from children and pregnant women for a short time to be abundantly safe.*

##### Radiation therapy causes nausea and vomiting

*No. Likely this myth arose because radiation therapy was being confused with acute radiation sickness (from a bomb or nuclear accident) or chemotherapy, both of which cause nausea and vomiting.*

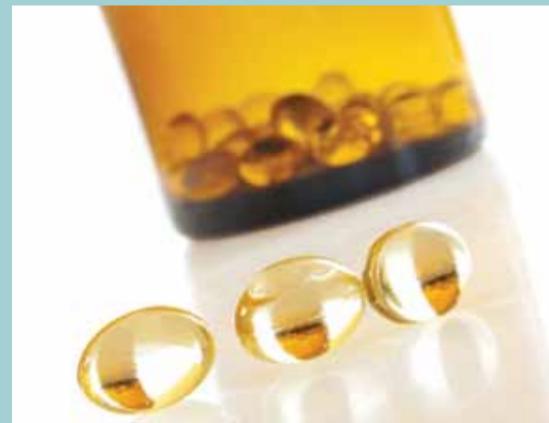
##### Radiation therapy will make my hair fall out

*No. Again, this is a symptom of acute radiation sickness (and chemotherapy) and cannot be caused by short-term, targeted doses.*

##### Radiation therapy will increase my chance of getting other cancers

*Therapeutic doses are so highly targeted that the risk of developing a secondary cancer is extremely low. A recent British study of radiation therapy patients found a secondary cancer rate of just 0.005%, and it noted that these cancers could have been caused by genetic and lifestyle factors and not the therapy.*

## PROSTATE CANCER NEWS BRIEFS



### Does Vitamin D Increase Risk?

A National Cancer Institute (NCI) study—reported in *Renal & Urology News*—finds that high blood levels of vitamin D may increase the risk of getting aggressive prostate cancer. One reason for the link might be that vitamin D promotes the manufacture of insulin, and other studies have already linked elevated insulin with the higher risk of getting prostate cancer.

### New Prostate Cancer Test in Use

A groundbreaking new prostate cancer screening test—recently approved by the US Food & Drug Administration (FDA) and currently available in Europe and Australia—may change screening through more accurate readings and reduction of false-positive results. The “Prostate Health Index” combines prostate-specific antigen (PSA) tests with a novel, clipped form of the precursor to PSA, called “-2 pro PSA.” This precursor is more elevated in prostate cancer patients and more accurately identifies the disease.

### Genetic Link Announced

According to *Cancer Epidemiology, Biomarkers, & Prevention*, researchers at the Fred Hutchinson Cancer Center in Seattle, Washington, have identified five gene mutations associated with a risk of getting aggressive prostate cancer. People with at least four of the five gene variations had a 50% increased risk of dying from prostate cancer than people who had two or fewer variations. This is the first validated evidence that inherited genetics play a role with the cancer.



## Exceptional Service, Wherever & Whenever You Need Us!



- > Full Service Community Hospital with 24/7 Emergency Department
- > Outstanding Physicians & Caring Staff
- > State-of-the-Art Surgery Center with Da Vinci® Robotic Surgery
- > ENT Specialists of Oneida Otolaryngology, Allergy & Audiology 221 Broad Street
- > Oneida Orthopedic Specialists 357 Genesee Street
- > Neurology Specialists of Oneida Orchard Hill Medical Building
- > Gorman Imaging Centers Oneida & Camden
- > Rehabilitation & Wellness Center with Therapeutic Pool 221 Broad Street
- > Primary Care Centers Canastota-Lenox Health Center Chittenango Family Care
- > Laboratory Draw Stations Oneida, Canastota, Camden & Chittenango
- > “Lullaby” Birthing Center
- > State-of-the-Art Sleep Center 601 Seneca Street

Find us on facebook

[www.oneidahealthcare.org](http://www.oneidahealthcare.org)