

Shorter Course of Radiation May Treat Prostate Cancer

Researchers See Potential Benefits for a 5-Week Course of Radiation Therapy

By Charlene Laino

WebMD Health News Reviewed by Laura J. Martin, MD

Sept. 27, 2011 -- A shorter, cheaper, and more convenient five-week course of radiation appears to work just as well as the traditional seven-and-one-half week schedule for men with prostate cancer.

In a study of 303 men, cancer recurred in about 15% of those given both the shorter and usual courses of radiation.

But five years after treatment, incontinence and other urinary side effects were about twice as common in men who received the short course, says Alan Pollack, MD, head of radiation oncology at the University of Miami Miller School of Medicine.

"Less than 5% of men treated with conventional radiation had persistent bladder control problems vs. less than 10% given the short course," Pollack says.

But even the higher rate of urinary problems in men treated with the short course in the study "was relatively low," says Jeff Michalski, MD, a radiation oncologist at Washington University Medical Center in St. Louis.

In other studies of radiation therapy for prostate cancer, rates of urinary problems were "typically in the 15% or higher range," he tells WebMD. Michalski was not involved with the work.

A Visual Guide to Prostate Cancer Targeted Radiation Delivery

One reason for the relatively low rates of bladder problems in both groups of men is that all received a newer, targeted technology to deliver the radiation called intensity-modulated radiotherapy (IMRT), Michalski says.

In IMRT, multiple radiation beams are focused at the prostate from many directions.

A computerized program allows doctors to adjust both the strength and the intensity of the beams, so that more radiation is blasted at the tumor and less at critical surrounding organs such as the bladder and rectum.

The study involved men with intermediate- and high-risk prostate cancer. A total of 152 men got the usual seven-and-one-half week course of IMRT. The rest were treated with higher doses of IMRT over five weeks.

The results showed that after five years:

Cancer came back in 20 men (15%) on conventional treatment and 21 (18%) on the short course, a difference so small it could have been due to chance. Cancer recurrence was defined as a rise in levels of prostate-specific antigen, or PSA. After radiation therapy, PSA levels usually drop to a stable and low level. Rising PSA levels are a sign of recurrence.

Rates of bowel problems and erectile dysfunction -- the other main side effects of radiation therapy -- were similar in the two groups.

About 5% to 7% of men reported bowel problems.

Just over 20% of men reported having no or unsatisfactory erections.

Results of the study were presented at a news briefing held in advance of the annual meeting of the American Society for Radiation Oncology (ASTRO) in Miami Beach, Fla.

Short-Course Radiation: The Trade-Off

The big question: Is shaving two-and-one-half weeks off treatment time now worth the potential risk of urinary problems years later?

"There is a trade-off," Pollack tells WebMD. "We're still learning how to best apply it."

ASTRO president-elect Michael Steinberg, MD, of the University of California, Los Angeles Health System, says that with refinement, the short course is going to catch on. "Patients want it [treatment] faster and cheaper."

Since fewer treatments are involved, the cost will be less than conventional treatment, Steinberg says.

The findings underscore the importance of following patients for the long term, Pollack says.

A previous analysis of the results, conducted about three years after treatment, found no difference in the rates of urinary problems among the two groups.

"It only emerged after five years," says Pollack, adding that longer follow-up is planned.

The short-course approach -- called hypofractionation -- is also showing promising results for the treatment of breast and several other types of cancer, he says.

These findings were presented at a medical conference. They should be considered preliminary as they have not yet undergone the "peer review" process, in which outside experts scrutinize the data prior to publication in a medical journal.

<http://www.webmd.com/prostate-cancer/news/20110927/shorter-course-of-radiation-may-treat-prostate-cancer>