New Technology Pinpoints Tumors for Radiation Therapy

Until recently, radiation oncologists – physicians with specialized training in the use of radiation to treat cancer – had to contend with the fact that tumors move around in the body in between and even during daily radiation treatments. To compensate for that movement, the physicians had to also radiate a "margin" of healthy tissue around the tumor.

Today, however, new technology at the Washington Radiation Oncology Center called Image Guided Radiation Therapy (IGRT) enables physicians to locate the tumor more precisely before each dose of radiation is delivered, minimizing the amount of healthy tissue exposed to radiation.

"Normal internal organ functions such as digestion, elimination, breathing, as well as changes in the way a patient is positioned for treatment, can cause the tumor to move", says Dr. Ranu Grewal-Bahl, a radiation oncologist and director of the Washington Radiation Oncology Center. "With IGRT, a digital image is captured prior to each treatment. The image is used to locate the tumor and more accurately target the radiation."

Dr. Bahl notes that with the increased accuracy of IGRT, higher doses of radiation may be utilized, resulting in increased control of the patient's cancer.

"IGRT also reduces the volume of normal tissue receiving radiation, accomplishing one of our ongoing goals in radiation therapy," Dr. Bahl says. "Additionally, fewer side-effects from treatment are anticipated. IGRT is particularly applicable for prostate cancer, lung cancer, as well as tumors of the abdomen and pelvis—all sites where significant organ motion can occur."

Radiation therapy has changed significantly over the past ten years. The introduction of IGRT is another step along the path of continual improvement.

CTA: Leading Edge Treatment Close to Home

The Washington Radiation Oncology Center is proud to offer local access to the latest innovations in radiation therapy. To learn more information about the Washington Radiation Oncology Center, located at 39101 Civic Center Drive in Fremont, please call (510) 796-7212 or visit the Center's website, www.whhs.com/services/cancer/roc.