Meet Your Cancer Team: A Radiation Oncologist

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What is radiation therapy?

Radiation therapy, or radiotherapy, is the use of various forms of high-energy X-rays to treat cancer and other diseases. It works by damaging the genetic material within cancer cells. Contemporary radiation therapy optimizes delivery to the tumor and minimizes the dose to the nearby normal anatomy.

How often is radiation therapy part of cancer care?

Approximately 60% of patients with a cancer diagnosis will receive radiation therapy at some point during their treatment. Radiation is often used in the postoperative setting to help improve local control of the cancer, minimize the chance of recurrence and improve survival. It's also used in place of surgery in certain scenarios where surgery may not be feasible or may be disabling. And it's often used with chemotherapy for curative purposes for many types of cancer, such as lung and prostate cancers, various types of brain tumors and head and neck cancers.

What is the radiation oncologist's role?

The radiation oncologist is the clinical leader of the radiation oncology team. The involvement starts with an initial patient consultation to determine if radiation is needed and, if so, the safest and most effective type. During radiotherapy, the radiation oncologist oversees the patient's clinical care and toxicity management and continues to follow the patient in the post-therapy surveillance period, both for early and late toxicity management and as part of a multidisciplinary team to monitor tumor control.

When is palliative radiation therapy used?

A tumor could be growing into a bony region, causing significant discomfort, or into the spinal cord, causing paralysis, or into the brain, where many types of chemotherapy can't enter. In cases such as these, radiation therapy in a palliative care setting can help alleviate the burden of cancer at these sites, improving quality of life, reducing pain and helping the patient regain function.

How is radiation typically administered?

The most common type is external beam radiation from linear accelerators, equipment that allows us to deliver computerized radiation therapy tailored to each patient’s anatomy, prior to each treatment.

What are common side effects?

In most cases, the side effects are limited to the area being radiated. If we’re radiating the lung or the chest, for example, it’s common that patients may get some esophagitis [inflammation that can damage the esophagus]. If we’re radiating the breast, patients may have skin changes or discomfort around the breast area. A few side effects are systemic, similar to chemotherapy, such as fatigue as well as feeling weak. Even if bone marrow is radiated, though, most patients are not at substantial risk for immune suppression.

What inspires you in your work?

The intersection of patient care, science, technology and innovation keeps me invigorated. I greatly value the relationship with patients I form as part of the oncology team. These patients entrust you, literally, with their lives. I’m so grateful that I have the privilege to help patients, to help make the journey feel safer and more secure and to ease their emotional burden.
