Advances in radiation treatment transform cancer care

Cancer care can be a trying time. But Neha Sharma, MD, says radiation treatment – where precise radiation is delivered outside your body to shrink tumors – has come a long way, making things safer and more convenient.

"The radiation delivery is very quick. Usually, it's 30 seconds to a minute," Dr. Sharma, a radiation oncologist who provides care at OSF HealthCare, explains. "It's like getting an X-ray. You don't feel or see anything. You lie on a table in a position that we plan out. The machine moves around you in set positions. It's typically open and not claustrophobic. You feel the same way when you leave as when you come in."

The goal of the treatment varies by the person. Dr. Sharma says radiation therapy can make cancer "go away completely." Or it's done to prevent cancer from coming back. And for advanced cancer, the therapy can lessen symptoms and keep the person comfortable in their final stage of life.

Dr. Sharma says advances in technology have allowed radiation to be very precise – hitting cancerous tissue and leaving healthy parts of your body alone. This, she says, can allow for a higher dose in some cases, which better treats the cancer.

"We're able to prevent some of the side effects we saw in the past," Dr. Sharma explains. "One example is breast cancer. We're able to avoid normal tissue and organs like the heart and lungs much more now with the equipment we use. We're able to prevent side effects to the heart and lungs, or they are much less common."

Those less common side effects include lung inflammation and accelerated coronary artery disease.

Another advancement: the amount of time a person spends undergoing radiation treatment. Understanding that treatment is individualized, Dr. Sharma says a prostate cancer treatment course may have lasted two months in the past. Now, it can be a month or shorter. For breast cancer, a six-to-seven-week treatment could be one to four weeks. Dr. Sharma adds that radiation therapy combined with other treatment has given more breast cancer patients the ability to conserve their breasts and avoid surgery to remove the breasts (a mastectomy).

"Discuss your situation with your radiation oncologist. Get all the information," Dr. Sharma urges. "Often, what you've heard or experienced prior isn't really what's happening with radiation treatment now. We've evolved quite a bit. We're fortunate to have changes in technology and new data to guide how we're treating people. It's resulted in better outcomes, both in control of the cancer and short- and long-term side effects."

Learn more about the latest advances in cancer care on the OSF HealthCare website.