

What They're Saying from the Front



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To learn about the effectiveness of a weapon, who better to ask than those who have actually used it in battle? In the war against cancer, oncologists who have used Intensity Modulated Radiation Therapy (IMRT), the latest technology in radiation treatments, have been enthusiastic and strongly supportive in what they have to say.

Patrick Swift, MD, medical director for Radiation Oncology at the Alta Bates Comprehensive Cancer Center in Berkeley, California, says he is “hard-pressed” to find any downsides to IMRT.

“We treated our first patient with IMRT on October 1, 2001, and now all of our prostate cancer patients are on it,” Swift says. “A safe estimate is that a quarter or possibly a third of our cancer patient population will soon be undergoing IMRT and we’ve been moving carefully and methodically because we want to make sure we’re doing it right.”

Swift says his center is focusing its IMRT efforts on prostate, head and

neck cancers, and a simplified variation on breast cancers. He thinks, however, that IMRT has excellent potential for the treatment of brain tumors, particularly brain tumors in children.

“The clear thing you’re trying to do for the kids is control a deadly disease right now, so you want the dose escalation that IMRT makes possible,” he says. “Plus, you want to prevent side effects, which are tremendously deleterious. So many of these kids with posterior fossa tumors go deaf now from conventional radiation therapy. Treating certain pediatric brain tumors with IMRT lowers the risk of deafness.”

Professor James D. Cox, MD, heads the Division of Radiation Oncology at The University of Texas M. D. Anderson Cancer Center. He says his staff began using IMRT about three years ago and now treats nearly 1,000 patients with the technology every year.

“The demand has been out there,” he says, “but we haven’t had

the resources in terms of physicists to work with us, so we had a slower ramp-up phase than we would have liked. We’d seen the progress with 3D conformal therapy and how it had improved our ability to give higher doses and decrease side effects in normal tissue. IMRT is a more sophisticated way of achieving both those goals and it is very much a part of our future.”

Richard Emery, chief medical physicist and director of radiation services at St. Vincent’s Comprehensive Cancer Center in New York, says their first patient was treated with IMRT in the spring of 2001 and the number has since grown to 200, most with cancer of the prostate.

“IMRT’s number one upside is that it lets us treat irregularly shaped targets with high conformity, thereby improving the therapeutic ratio. In other words, more dose to the target and less to the normal tissue,” Emery says. “IMRT has taken us to another

level of care for our patients. It’s deeply satisfying to have a technology that can be curative without the side effects associated with conventional therapy.”

The downside to IMRT most often cited is the added demands on staff in terms of training and preparation. Ted Lawrence, MD, Isadore Lampe Professor of Radiation Oncology at the University of Michigan, who has been involved with IMRT since the technology’s inception, says, “If you’re going to deliver a very conformal dose of radiation, you have to have a very high level of knowledge as to where the tumor is. Setup and planning are critical.”

However, the added demands on staff can deliver a substantial payoff to the patient, as Lawrence acknowledges.

“IMRT permits us to have dose distributions that were previously impossible,” he says. “It has opened up some extraordinary possibilities and will let us test whether it will achieve a revolution in cancer treatment.” ■