

*Inside this issue*

## Zeroing in on focused beams

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This month, we dedicate our issue of *Community Oncology* to radiation therapy and some of the rapidly developing applications, techniques, and subspecializations in the field. Dr. Jondavid Pollock, of Schiffler Cancer Center in Wheeling, West Virginia, has done an admirable job piloting this special edition of the journal as our Guest Editor.

We begin with proton beam radiotherapy, a truly remarkable development in high-energy particle radiation therapy. Dr. Pollock interviewed one of the fathers of this technique, Dr. Herman Suit of Massachusetts General Hospital. It's a fascinating look at the evolution of this lifesaving technology. See page 586 for this month's Community Dialogue.

As outlined by Dr. Allan Thornton et al, on page 599, there are two main advantages to proton beam radiotherapy. First, there is much better localization of the beam to the exact location of the tumor, presumably the best way to avoid normal tissue. Second, the higher energy itself has the potential for greater cancer cell kill, once that beam is localized to the precisely defined tumor location.

Unfortunately, the expense of these proton beam therapy units has precluded their widespread dissemination, but the Thornton article discusses the pros and cons of the treatment and the soon-to-be greater availability nationwide.

Stereotactic radiation, also known as Gamma Knife radiation, entered the therapeutic arena as a modality to treat difficult brain/cranial metastases not amenable to surgery. A review by Dr. Paul W. Read on page 616 details how this technique may now be applied to many other sites in the body, including tumors in the lungs, liver, and spine. Advantages and disadvantages of this technique are reviewed in this very valuable discussion of an increasingly successful application of shorter course, higher dose, carefully confined radiation therapy.

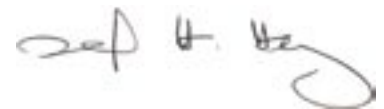
We are all familiar with stereotactic radiation therapy for lesions of the brain. This modality is often given after whole-brain radiotherapy for brain metastases and/or primary intracranial tumors but can, in some

cases, be used first with great success. On page 589, Drs. Scott G. Soltys and Iris C. Gibbs review application of stereotactic radiation for metastases to the spine. Here again, the Gamma Knife technique has largely been employed for those whose cancer has failed previous conventional radiation therapy. The Gamma Knife offers patients pain relief they could not have received previously. It may not be reasonable to offer this technique as a way to minimize some of the side effects of conventional radiation therapy and maximize the delivery of tumor-killing radiation to symptomatic spinal metastases. Although stereotactic radiation can be delivered over a much shorter period than conventional radiation, it isn't useful for large tumor volumes or brain metastases.

In our Challenging Cases/Rare Cancers section on page 610, Dr. Jondavid Pollock presents the case of a patient with Merkel cell carcinoma. I remember the last case I had of such a patient and the incredulous look on his face when I explained how this tiny spot on his arm was a rare tumor that required systemic chemotherapy. Dr. Pollock's case presentation and treatment review is very useful for the practicing clinician.

There is a most interesting and practical article in our Managing Side Effects section this month on page 625. Dr. Christopher D. Jahraus et al report that, when diagnosed properly, small intestinal bacterial overgrowth (SIBO) can be treated, decreasing or eliminating debilitating diarrhea, which some patients experience when radiation therapy is applied to or near the GI tract. The authors offer some practical points on diagnosis and therapy of SIBO.

We hope this special issue offers you the same kind of informative and practical articles you have come to expect from *Community Oncology*. As always, we welcome your comments and contributions. Please contact us at [editor@CommunityOncology.net](mailto:editor@CommunityOncology.net).



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