

## EDITORIAL



**John Suh, MD, Editor-in-Chief**

## Out for blood: Treatment updates in leukemia and lymphoma

**Z**ombie blood drives and other creative campaigns targeting millennial culture are one strategy leukemia and lymphoma societies use to increase awareness and support the battle against hematopoietic cancers. In radiation oncology, efforts to assist the many Americans with leukemia, lymphoma or myeloma may be less imaginative, but the role of radiation therapy is very important in eradicating and curing these patients.

As part of this month's blood cancer focus, *Total body irradiation: A practical review* helps fill the gap in the modern literature by examining TBI's role in hematopoietic stem cell transplantation, which represents one of the most successful therapies for leukemia and lymphoma. Author Carson Wills, BS, Penn State Hershey College of Medicine, and colleagues discuss dosing, equipment, complications, and indications as they explore TBI's three-pronged purpose: eliminating residual cancer cells, creating space for stem cell engraftment through bone marrow depletion, and halting rejection of donor stem cells through immunosuppression.

We also bring you the enlightening article, *Substance or style? Evaluating advanced radiation therapy delivery techniques for Hodgkin lymphoma* by Johns Hopkins' Zachary D. Guss, MD, MSc; and Stephanie A. Terezakis, MD. This review assesses the roles of IMRT, respiratory management, and proton therapy as promising technologies that may lower toxicities beyond the traditional techniques of shrinking treatment fields.

Two case reports further underscore toxicity concerns. *Optimal treatment positioning to achieve better heart sparing in a left-sided, whole-breast irradiation case unfit for deep inspiration breath-hold treatment* by Vishruta A. Dumane, PhD, et al, Mount Sinai, NY, highlights the need for a careful comparison of both supine and prone positions when determining the optimal plan for a young patient with pre-existing cardiac risk factors. The winner of this quarter's Clinical Case Contest, this excellent case report offers a useful, real-world example of how to choose between techniques.

In *Chemoradiotherapy-induced toxicity with high-dose, three-dimensional conformal radiotherapy for lung cancer: Challenges with modern techniques*, University of Maryland's James W. Snider, III, MD, et al, detail a patient's significant toxicity following high-dose 3D-CRT chemoradiotherapy for Stage IIIA lung cancer. This report is a powerful reminder of potential complications related to radiation therapy and the heightened responsibilities that radiation oncologists face every day.

I hope you enjoy the articles in this issue, and our regular news updates and additional offerings at [www.appliedradiationoncology.com](http://www.appliedradiationoncology.com). As always, thank you for your support of ARO. Best wishes for a restorative and fulfilling summer!

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