Interventional Oncology: A Closer Look





Over the past few years, interventional oncology (IO) has evolved from a slang term bantered back and forth among interventional radiologists to a clinically based subspecialty that

represents one of the fastest growing areas in minimally invasive procedures. With the advent of new dedicated devices and therapeutic platforms, along with a deeper understanding of how we can improve the lives of patients afflicted with cancer, the choices, techniques, and opinions regarding best practice can be overwhelming. We hope that this issue of *Endovascular Today* will provide a glimpse into the world of IO and offer perspectives of the opportunities that lie ahead.

With this issue, we have introduced a series of vignettes and discussions entitled, What Would World Experts Do Under Challenging And Tricky Encounters (WWW EDUCATE). These articles consist of short, case-based, curbside consults that represent common but difficult situations in the categories of liver embolization, lung ablation, genitourinary ablation, and liver ablation. We presented these challenging cases to world-renowned experts and asked them to provide their approaches to treatment.

This edition kicks off with Dr. Ganguli and his list of the top five must-read IO publications and key points that can improve your practice. Next, Drs. Park and Kessler explore the use of transarterial therapies before and after major liver resection, as well as what interventional radiologists and surgeons need to consider in terms of safety and efficacy as the combined use of liver-directed therapies and hepatic surgery continues to increase. Dr. Yoon then does a deep dive into how portal vein embolization, radioembolization, and portal vein ligation for staged hepatectomy can be used to increase future liver remnant volume prior to major hepatectomy.

Along with our colleagues, we provide an article that discusses the basic principles of activity and their relationship to compartmental dose as they apply to trans-

arterial radioembolization and review how to optimize dose using a practical approach to dosimetry and some free iOS software.

As IO is increasingly being offered in the pediatric setting, Dr. Heran reviews the roles of biopsy, venous and enteric access, and current and evolving locoregional treatment strategies for children affected by cancer. Dr. Pennycooke and colleagues use three case examples to provide insight into how interventional specialists can work with oncologists and palliative care physicians to reduce pain and improve quality of life for patients with end-stage metastatic cancer by utilizing image-guided palliative musculoskeletal procedures.

Finally, Dr. Newton describes the interventional specialist's role in precision medicine, a new health care strategy that involves selecting optimal treatment based on a patient's genetic, molecular, and cellular features of disease, and emphasizes the importance of biopsy for diagnosis and disease characterization now and potential new indications in the future.

Also included in this issue of *Endovascular Today* are two articles on access and closure. In the first article, Dr. Krajcer shares his thoughts on percutaneous endovascular aneurysm repair and where the future might take this procedure. The second article by Drs. Ranade and Fischman provides insight into the safety of transradial access in coagulopathic patients and patients on anticoagulation who undergo noncoronary endovascular interventions.

We have designed this issue to provide pragmatic perspectives and practical approaches to the management of the oncology patient. The growth and expansion of IO is a reflection of an unmet need within the cancer community that only continues to increase in demand. We realize that the scope of IO has not been conveyed in this issue but hope that the content and the work of our contributors will provide an introduction and inspiration to incorporate IO into your practice.

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