Endovascular Oncology

As endovascular interventionists, all of us are keenly aware of the chronic health threat impacted by atherosclerosis in the cardiovascular system. Patients with chronic ailments, whether caused by atherosclerosis, diabetes, or cancer, are becoming more prevalent in our society and represent a major patient cohort in our health care system today. Seven of 10 Americans who die each year, or more than 1.7 million people, die of a chronic disease. While heart disease remains the leading cause of death for both men and women in the US according to the Centers for Disease Control and Prevention, cancer has consistently been the second leading cause of death in this country during the last decade. In fact, it is estimated that more than 560,000 patients, or 1,500 people a day, will die of cancer in the US in 2005.

As medical technologies continue to advance, our ability to provide early diagnosis and proper treatment will similarly grow. Our industry partners working jointly with physician researchers are constantly refining novel and less-invasive modalities to treat patients with debilitating conditions. Due in part to the technology advancement, we have more therapeutic armamentariums, for instance, in the treatment of carotid or infrainguinal occlusive disease today than we had a decade ago. This beneficial impact of technology refinement has similarly occurred in other specialties. More novel treatment strategies and less-invasive therapeutic options are utilized today in the treatment of a variety of cancer conditions.

This issue of *Endovascular Today* provides a glimpse of various innovative treatment strategies incorporating endovascular technologies in the treatment of surgical oncology. Many tumors, in which surgical resection was considered as the only therapeutic option in the past, are treated today with less-invasive adjunctive treatment modalities. Many endovascular interventions have played a major role in these less-invasive adjunctive treatments, with a goal to render subsequent surgical resection safer. Other catheter-based interventions have proven to be so effective in the treatment of an oncological condition that they have become the primary treatment modality replacing the conventional surgical treatment approach.

To illustrate the beneficial role of endovascular interventions in the management of cancer conditions, Dr. David Madoff provides an excellent review of preoperative portal vein embolization in patients with chronic liver disease or liver tumor. This adjunctive treatment strategy has significantly reduced postoperative morbidity and enabled safe hepatic resection for patients who might not be previously considered a suitable surgical candidate for liver resection. Drs. Michael Wallace and Ravi Murthy discuss the role of transarterial chemoembolization in patients with hepatic malignancy. As interventional radiologists from M.D. Anderson Cancer Center, these authors are ideally suited to share with us their unique experience of endovascular therapy in surgical oncology. Dr. Alan Cohen and colleagues provide an excellent review regarding the role of uterine artery embolization in the management of uterine fibroids. The beneficial role of preoperative embolization in carotid body tumors to reduce operative blood loss is summarized in an article by Dr. Robert McLafferty. In addition, Dr. Peter Faries and colleagues discuss the role of stenting in the management of superior vena cava syndrome. Lastly, the adjunctive role of renal artery embolization with concomitant nephrectomy as well as embolotherapy in the treatment of peripheral arteriovenous malformation are discussed by Dr. Peter Lin, Dr. Alan Lumsden, and their colleagues from the Baylor College of Medicine.

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As Guest Chief Medical Editors for this issue of *Endovascular Today*, we are delighted that we can provide this timely coverage of endovascular oncology. We hope that you enjoy these articles and find them to be beneficial in your clinical practice. ■

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