## **Optimizing Outcomes** in CT Imaging

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e are grateful for the support of GE Healthcare for providing an unrestricted educational grant to support this very important medical initiative focusing on cardiac imaging. Cardiac imaging plays an increasingly important role in the diagnosis of such cardiovascular disorders as coronary artery disease, cardiomyopathies, aortic aneurysm and dissection, and peripheral vascular disease. Cardiologists, along with vascular medicine and vascular surgical specialists and in partnership with radiologists, increasingly embrace these technologies and incorporate them into their clinical practices.

The article by Dr. Hooman Madyoon, Gerald Friede, and me entitled "Priceless Clinical Pearls in the Performance of Cardiac CT" provides background information on the utility of cardiac and vascular CT, current indications for its use, and potential new applications. We also provide important tips based on our accumulation of one of the largest experiences with cardiac CT in the United States that will assist the cardiac imager who performs cardiac CT.

Contrast agents are an essential part of cardiac and vascular imaging. Used judiciously, these agents enhance our ability to evaluate cardiac and vascular structures. Dr. Steven D. Weisbord, in his submission "Iodinated Contrast Media and the Kidney," reviews and summarizes the physicochemical properties that define and differentiate iodinated contrast media, discusses the purported relationship between these properties and kidney injury, and describes the salient findings of clinical trials and meta-analyses that have compared the nephrotoxic effects of contrast agents.

Drs. Charles J. Davidson and Ata K. Erdogan, in their submission entitled "Contrast Media: Procedural Capacities and Potential Risks," expand on the subject of contrast and focus on issues of safety, including effects on cardiac hemodynamics, rhythm, thrombus formation, anaphylaxis, and acute renal injury. This is a wonderful guide for cardiac and vascular imaging specialists and interventionalists, as it will enhance their ability to prevent these complications and to treat them when they occur.

Dr. Stephen Ferrara, an interventional radiologist, writes on "Interventional Radiology Procedures: Addressing the Needs of the Cardiovascular Patient." This is an important review of some of the principal comorbidities found in cardiac patients and how they should influence patient care in the vascular intervention suite. It is critical that the interventionalist be aware of these comorbidities in order to reduce the incidence of cardiac complications in these patients.

We hope you find this supplement useful and that it better prepares you for the wonderful world of cardiac and vascular imaging.