



Master cardiac CT: can it be easy?

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When first working in cardiovascular clinical practice more than two decades ago, the earliest understanding of cardiac imaging was limited to general chest X-ray planar imaging, and CT was always considered to be of greater diagnostic value for tumors (1). As technology continued to advance, the use of CT in cardiovascular disease opened up a new era of cardiac imaging (2). Cardiovascular multidetector tomography has played a critical role in the overall treatment process of cardiovascular disease diagnosis, treatment decisions, and the follow-up process (3). However, most clinicians, including many cardiovascular clinicians, lack a good grasp of the understanding, interpretation, and application of cardiac CT (4). In particular, some clinicians focus on a limited area of subspecialty and are unable to grasp the clinical value of this technology fully. This can be attributed to the busy clinical workload and the lack of a comprehensive and coherent guide to help clinicians quickly grasp the interpretation and application of cardiac CT (5).

I was delighted to come across “Cardiac CT Made Easy—An Introduction to Cardiovascular Multidetector Computed Tomography”. As the title suggests, it is an introductory guide that demonstrates the application of cardiac CT through a plethora of practical cases. This comprehensive clinical textbook on cardiac CT summarizes the application of cardiac CT to multiple diseases.

The book is divided into two main parts. The former focuses on the principles of multidetector computed tomography, from the normal cardiac anatomy of CT to the techniques of multi-row CT. The concise narrative and the myriad of illustrations make it easy for readers to understand and remember. The latter—a highlight of the book—deals with the application of cardiac CT in cardiovascular diseases. This describes the role and indications for diagnosing the most common cardiovascular

diseases. All diseases are presented utilizing concise descriptions while complementing the features of other imaging ultrasound and MRI for comparison, followed by a graphic illustration of actual cases. This format is very effective and easily captures the imaging features of the disease.

The following chapters are highlighted due to how it epitomizes succinctness and clarity in the book. Chapter 4 describes the CT imaging features of cardiac cavity and myocardial diseases. In many clinical situations, medical professionals tend to overlook the diagnostic value of CT for myocardial diseases; however, the view in which cardiac function and valve structure are evaluated can still be further developed.

Chapter 8 of this book deals with coronary artery and venous disease. Coronary imaging by CT has become a significant and commonly used test for the clinical diagnosis of coronary heart disease. The text accentuates how, while plain CT can be used to detect calcific load in asymptomatic people by calcification score, enhanced CT can provide a very accurate assessment of coronary vessels. Enhanced CT can also better identify the nature of plaque and determine plaque stability. Combined with myocardial perfusion imaging, it is of great value in guiding the choice of clinical strategy.

Chapter 10 then focuses on the use of CT in arterial disease. This is the most essential part of the application of CT in cardiovascular disease, including the diagnosis and differential diagnosis of acute aortic arch syndrome, the development of adjunctive treatment plans, and the evaluation of prognosis. CT shows great promise in this area and is the clinical examination of choice.

Other chapters in this book also discuss many diseases that are not usually encountered in the clinic and rarely can

be seen in typical images. The images provided in this book open up clinical thinking and vision.

Overall, the book “Cardiac CT Made Easy—An Introduction to Cardiovascular Multidetector Computed Tomography” illustrates the application of cardiac CT in cardiovascular diseases in a very clear manner through concise language and a large number of real cases. The second edition of this book was translated into Chinese for distribution in the mainland of China and has become a desk book and tool for many Chinese physicians. As technology continues to evolve and new techniques emerge, the value of cardiac CT in the management of cardiovascular disease will become more and more prominent. This tool is ideal for young physicians preparing for a career in this field as well as medical practitioners working in the cardiovascular industry, who often use it as a tool to refer to in their clinical work.

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aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

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