

## Χαρακτηριστικά:

- Provides **comprehensive, expert information** on all aspects of cardiac and vascular imaging to help you quickly determine the correct diagnosis for patients with symptoms or indications of cardiovascular disease
- Contains **200+ fully updated chapters** on specific areas or groups of related diseases, with in-depth information ranging from common diagnoses to the rare and obscure; each topic is supported by **multimodality imaging examples with detailed discussions** from experts in the field
- Features **new chapters** on the expanded use of AI in cardiovascular imaging, as well as multimodality advances in PET and MR for inflammatory cardiomyopathies and in CT and MR for advances in myocardial blood flow imaging
- Discusses **new imaging guidelines** for the management of acute and chronic chest pain and new transcatheter procedures
- Covers the **latest CAD-RADS 2.0 classification**, COVID-related vascular complications, and novel dose-reduction techniques
- Includes access to **new videos** that promote a visual understanding of cardiac flow and normal vs. abnormal cardiovascular health, among other topics
- Reflects new material throughout based on **WHO updates for tumors and pulmonary hypertension**
- Features **more than 2,300 high-quality print images** (with an **additional 1,300+ images in the complimentary eBook**), including videos, radiologic images, full-color illustrations and graphics, histologic images, and clinical photographs
- Uses a **bulleted, image-rich layout** with short chapters designed for quick access to critical content on terminology, characteristics seen in various imaging studies on the same anatomic location, differential diagnoses, pathologic and clinical issues to consider, and more
- **Includes an eBook** that enables you to access everything in this print version as well as **additional text, images, and videos** with the ability to search, customize your content, make notes and highlights, and have content read aloud

## Περιεχόμενα:

### Section 1: Introduction and Overview

Cardiac CT: Acquisition and Postprocessing, Indications and Interpretation

Cardiac MR: Acquisition and Imaging Protocols

Multimodality Approach to Cardiovascular Disorders

Cardiac Anatomy

Novel Technologies and Dose Reduction Techniques in Cardiac CT (Multienergy CT, Photon-Counting CT, etc.)

AI in Cardiac Imaging

## **Section 2: Coronary Artery Disease**

Approach to Coronary Heart Disease

New Coronary Imaging Guidelines for Acute and Chronic Chest Pain

CAD-RADS 2.0

Coronary Anatomy

Myocardial Bridge

Single Coronary Artery

Duplicate Left Anterior Descending Coronary Artery

Anomalous Coronary Origin From Opposite Sinus

Coronary Fistula

Anomalous Origin of Coronary Artery From Pulmonary Artery

Coronary Artery Aneurysm

Kawasaki Disease

Vasculitis Affecting Coronary Arteries

Coronary Artery Calcium Scoring

Coronary Atherosclerotic Plaque

Coronary Artery Plaque Analysis

Coronary Thrombosis

Coronary Artery Stenosis

Ischemia Imaging With CT-FFR

Ischemia Imaging With CT Perfusion

Ischemia Imaging With MR

Coronary Embolism

Spontaneous Coronary Artery Dissection

Acute Myocardial Infarction

Chronic Myocardial Infarction

Nonatherosclerosis Myocardial Infarction

Papillary Muscle Rupture

Postinfarction Mitral Regurgitation

Left Ventricular Free Wall Rupture

Ventricular Septal Rupture

Postinfarction Left Ventricular Aneurysm

Postinfarction Left Ventricular Pseudoaneurysm

Postangioplasty Restenosis

In-Stent Restenosis

Post-CABG Thrombosis

Post-CABG Atherosclerosis

Post-CABG Aneurysm

Coronary Dissection, Secondary/Iatrogenic

## **Section 3: Heart Failure and Cardiomyopathies**

Approach to Heart Failure

Right Heart Failure  
Left Heart Failure  
Left Ventricular Hypertrophy  
Right Ventricular Hypertrophy  
Pulmonary Venous Hypertension/Pulmonary Edema (Cardiogenic)  
Imaging of Cardiomyopathies: Evidence and Technique  
Myocardial Tissue Mapping  
Myocardial Strain Imaging  
Nonischemic Dilated Cardiomyopathy  
Hypertrophic Cardiomyopathy  
Athlete's Heart  
Sigmoid Septum  
Restrictive Cardiomyopathy  
Cardiac Amyloidosis  
Cardiac Sarcoidosis  
Myocarditis  
Post-COVID and Vaccine-Related Myocarditis  
Endomyocardial Fibrosis  
Hypereosinophilic Syndrome  
Arrhythmogenic Right Ventricular Cardiomyopathy  
Arrhythmogenic Cardiomyopathy  
Noncompaction Cardiomyopathy  
Chagas Disease  
Iron Overload Syndromes  
Takotsubo Cardiomyopathy  
Muscular Dystrophy  
Fabry Disease  
Mechanical Circulatory Assist Devices  
Heart Transplant

#### **Section 4: Valvular**

Approach to Valvular Disease  
Bicuspid Aortic Valve  
Aortic Stenosis  
Aortic Regurgitation  
Mitral Stenosis  
Mitral Valve Prolapse  
Mitral Regurgitation  
Mitral Annular Calcification and Caseous Necrosis  
Mitral Annular Disjunction  
Tricuspid Stenosis  
Tricuspid Regurgitation  
Carcinoid Syndrome  
Pulmonary Stenosis

Pulmonary Regurgitation  
Multivalvular Disease  
Infective Endocarditis  
Rheumatic Heart Disease  
Radiation Valvular Disease  
Valvular Prosthesis  
Prosthetic Valve Complications  
Left Ventricular Apical Aortic Conduit

### **Section 5: Pericardial**

Approach to Pericardial Disease  
Pericardial Anatomy  
Acute Pericarditis: Infectious  
Acute Pericarditis: Noninfectious  
Chronic Inflammatory Pericarditis  
Constrictive Pericarditis  
Pericardial Cyst  
Absent Pericardium  
Pericardial Effusion  
Pericardial Tamponade  
Primary Pericardial Tumors, Benign  
Pericardial Germ Cell Tumors  
Pericardial Lymphoma  
Pericardial Sarcoma  
Pericardial Mesothelioma  
Pericardial Metastases

### **Section 6: Cardiac Neoplasms**

Approach to Neoplastic Disease  
Tumor Mimics  
Lipomatous Hypertrophy, Interatrial Septum  
Cardiac Thrombus  
Cystic Tumor of Atrioventricular Node  
Intracardiac Blood Cysts  
Atrial Myxoma  
Papillary Fibroelastoma  
Cardiac Lipoma  
Hemangioma  
Paraganglioma  
Rhabdomyoma  
Fibroma  
Metastatic Disease  
Tumor Extension Into Atria  
Cardiac Sarcomas

Aortic Sarcomas  
Lymphoma  
Erdheim-Chester Disease  
Vascular Malformations

### **Section 7: Congenital Heart Disease**

Anatomic Approach to Congenital Heart Disease  
Imaging Approach to Congenital Heart Disease  
Tetralogy of Fallot  
Tetralogy of Fallot: Postsurgical and Palliation, Blalock-Taussig Shunt  
D-Transposition of Great Arteries  
L-Transposition of Great Arteries  
TGA Repair: Arterial and Atrial Switch  
Truncus Arteriosus  
Pulmonary Atresia  
Hypoplastic Left Heart Syndrome  
Tricuspid Atresia  
Glenn and Fontan Shunts  
Ebstein Anomaly  
Cor Triatriatum  
Heterotaxia Syndromes  
Approach to Shunts  
Atrial Septal Defects  
Ventricular Septal Defects  
Endocardial Cushion Defect  
Patent Ductus Arteriosus  
Aortopulmonary Window

### **Section 8: Interventional and Electrophysiological Procedures**

Transcatheter Aortic Valve Replacement: Procedure Planning  
Transcatheter Aortic Valve Replacement: Follow-Up  
Transcatheter Mitral Valve Repair  
Transcatheter Mitral Valve Replacement: Procedure Planning and Follow-Up  
Pacemakers/ICDs  
Imaging Before and After Electrophysiology Procedures  
Pulmonary Vein Mapping  
Left Atrial Thrombus  
Left Atrial Appendage Imaging Pre- and Post Occluder Device Placement  
CT Prior to Ablation in Ventricle  
MR Prior to Ablation of Scar in Ventricle  
Recognizing Devices and Implants on Imaging

### **SECTION 9: AORTA**

Approach to Congenital and Acquired Disease of Aorta

## Thoracic Aorta and Great Vessel Anatomy

Coarctation of Aorta

Interrupted/Hypoplastic Aorta

Double Aortic Arch

Right Aortic Arch

Persistent Fifth Arch

Aberrant Right Subclavian Artery

Pseudocoarctation

Ductus Diverticulum

Thoracic Aortic Aneurysm

Mycotic Aneurysm

Marfan Syndrome

Approach to Acute Aortic Syndromes

Aortic Dissection

Intimointimal Intussusception

Aortic Intramural Hematoma

Penetrating Atherosclerotic Ulcer

Limited Intimal Tear

Aortic Aneurysm: Rupture

Takayasu Arteritis

Giant Cell Arteritis

Traumatic Aortic Injury

Chronic Posttraumatic Pseudoaneurysm

Surgeries of Thoracic Aorta

## **Section 10: Pulmonary Arteries**

Approach to Pulmonary Vasculature

Proximal Interruption of Pulmonary Artery

Pulmonary Sling

Pulmonary Arteriovenous Malformation

Pulmonary Aneurysm

Pulmonary Artery Pseudoaneurysm

Acute Pulmonary Embolism

Pulmonary Hypertension: General Imaging Findings

Group 1 Pulmonary Arterial Hypertension With Overt Features of Venous/Capillary Involvement

Group 1 Pulmonary Arterial Hypertension

Group 2 Pulmonary Hypertension

Group 3 Pulmonary Hypertension

Group 4 Pulmonary Hypertension

Group 5 Pulmonary Hypertension

Pulmonary Artery Sarcoma

Branch Pulmonary Artery Stenosis

## **Section 11: Veins**

Approach to Venous Disease

Venous Anatomy

Left Superior Vena Cava

Azygos Continuation of Inferior Vena Cava

Scimitar Syndrome

Total Anomalous Pulmonary Venous Return

Partial Anomalous Pulmonary Venous Return

Pulmonary Vein Stenosis

Superior Vena Cava Syndrome

May-Thurner Syndrome

Nutcracker Syndrome