

- Introduction: Why this book?

## **Section: A Fundamentals Of Imaging Techniques**

- Assessment of LV systolic function
- Assessment of LV diastolic function
- Right heart evaluation
- Pharmacologic stress echocardiography
- Non-pharmacological stress echocardiography
- Contrast echocardiography
- Tissue Doppler imaging and speckle tracking echocardiography

## **Section B. Clinical Applications**

### **Acute Coronary Syndrome**

- Determining the etiology of chest pain
- Assessment of the extent of myocardial damage
- Post-myocardial infarction risk stratification
- Mechanical complications of myocardial infarction

### **Stable Angina**

- Stress echocardiography for detection of myocardial ischemia and guiding treatment
- The use of contrast agents
- Direct visualization of coronary arteries and coronary blood flow

### **Chronic Ischemic Left Ventricular Systolic Dysfunction**

- Ischemic mitral Regurgitation
- Assessment of myocardial viability
- Role in patients undergoing cardiac resynchronization therapy

### **Advanced Heart Failure**

- Evaluation and follow-up of patient receiving ventricular assist devices
- Evaluation and follow-up of patient undergoing heart transplantation
- Echocardiographic guidance in ventricular reconstruction surgeries

### **Coronary Artery Diseases in Pediatric Age Groups**

- Coronary artery diseases in pediatric age groups

### **Coronary Artery Diseases In Systemic Illnesses: Special Issues**

- Chronic kidney disease
- Connective tissue disorders
- Miscellaneous disorders

### **Preclinical Detection of Atherosclerosis**

- Assessment of endothelial dysfunction
- Doppler assessment of carotid Atherosclerosis

### **Epilogue**