

# Aortic Disease FocusClass

Mastering Echocardiography with Ultrasound Demonstrations, Case Studies, and Practical Tips Embark on a journey of learning to learn how to assess the Aorta. This is a comprehensive course tailored for healthcare professionals in echocardiography. This course skillfully blends ultrasound demonstrations, real-life case studies, and practical tips to enhance your diagnostic capabilities. It covers essential topics such as aortic anatomy, physiology, aneurysms, genetic diseases, dissection, and the latest treatment and management strategies (Guidelines). Ideal for cardiologists, radiologists, sonographers, and medical students, this course is a pivotal step towards mastering life-saving echocardiographic techniques and staying updated with current guidelines. Enroll now to advance your expertise in cardiac care.



#### Lectures & Quizzes:

- Free lecture 1
- Free lecture 2

• Free lecture 3

#### Chapter 2 0.25 CME

# Introduction / Anatomy / Physiology

Why is the topic of aortic disease important? Which role does echocardiography play? Where is the aorta? What are the different anatomic segments? How does the aorta affect blood pressure?

#### Lectures & Quizzes:

- Introduction
- Anatomy

- Physiology
- Quiz Introduction / Anatomy / Physiology

# Imaging of the Aorta

In which windows and views can the aorta be seen, a systematic approach to imaging the aorta, Expanding our view - TEE and abdominal ultrasound, Demonstrations.

#### Lectures & Quizzes:

- Ascending Aorta
- Aortic Arch
- Descending Aorta
- Abdominal Aorta

- Role of TEE
- Measurements
- Quiz Imaging of the Aorta

#### Chapter 4 0.5 CME

### Aortic Aneurysm

How do we define an aneurysm? Dilatation and aneurysm what is the difference? How do you classify aortic aneurysms? What causes aortic dilatation and aneurysm formation? Case examples.

#### Lectures & Quizzes:

- Definition
- Classification

- Pathophysiology
- Quiz Aortic Aneurysm

#### Chapter 5 0.5 CME

# Heritable thoracic aortic disease (HTAD)

Genetics of aortic dissection. What are connective tissue diseases? What is meant by syndromic and nonsyndromic aortic non-syndromic? Marfan disease, Loeys-Dietz, Ehlers Danlos and Turner syndrome, what are the typical features and what is the risk for aortic dissection? Case examples.

#### Lectures & Quizzes:

- Congenital Abnormal Valves and the Aorta
- Marfan syndrome
- Loeys-Dietz + Ehlers Danlos + Turner Syndrome
- Non-Syndromic
- Quiz Heritable thoracic aortic disease (HTAD)

#### Chapter 6 0.5 CME

# Aortic Syndromes / Dissection

Which patients are at risk? What is the scope of the problem? How can I detect aortic dissection with echo? What are the classic findings? Classification of dissection, What are the treatment options? Case examples.

#### Lectures & Quizzes:

- Introduction
- Dissection Features
- Classification Examples

- Dissection Additional Findings
- Aortic Syndromes
- Quiz Aortic Syndromes / Dissection

#### Chapter 7 0.5 CME

# Treatment and Surveillance

Which surgical procedures are performed to treat aortic aneurysm? What are the potential complications? Aortic stenting as a treatment option, When should surgery be performed? Treatment guidelines, Using echo after surgery and intervention.

#### Lectures & Quizzes:

- Procedures
- Indication for Surgery

- Echo and Follow Up
- Quiz Treatment and Surveillance

#### Chapter 8 0.25 CME

# Coarctation

One of the most common congenital defects that can affect the aorta is Coarctation. This chapter explains: how the diagnosis is made with echo, how patients can present, which views you should use, how to quantify the severity and what the therapeutic consequences are.

#### Lectures & Quizzes:

- Basics
- Imaging and Echo Findings

- Treatment Options
- Quiz Coarctation

#### Chapter 9 0.25 CME

### Summary

Putting it all together, a brief summary of what we have covered.

Lectures & Quizzes:

• Aorta Summary

• Quiz - Summary