Case # 1
1. The cardiac output in this patient is reduced because of:
   O a) tamponade physiology
   O b) restrictive physiology
   O c) coronary artery disease
   O d) left bundle branch block
1. The cardiac output in this patient is reduced because of:

- O a) tamponade physiology
- ● b) restrictive physiology
- O c) coronary artery disease
- O d) left bundle branch block
2. Looking at the parasternal long-axis view, this patient most likely has which of the following etiologies:

- O a) hypertension
- O b) sarcoidosis
- O c) amyloidosis
- O d) mitral stenosis
2. Looking at the parasternal long-axis view, this patient most likely has which of the following etiologies:

- O a) hypertension
- O b) sarcoidosis
- ● c) amyloidosis
- O d) mitral stenosis
3. In the apical 4ch view, why does the interatrial septum appear so fat?

- a) hyperlipomatous
- b) transducer beam width
- c) amyloid deposits
- d) poor far-field resolution
3. In the apical 4ch view, why does the interatrial septum appear so fat?

- O a) hyperlipomatous
- O b) transducer beam width
- • c) amyloid deposits
- O d) poor far-field resolution
Hyperlipomatous
4. The color flow Doppler demonstrates:
   - O a) normal tricuspid regurgitation
   - O b) moderate tricuspid regurgitation
   - O c) mild tricuspid regurgitation
   - O d) pulmonary hypertension
4. The color flow Doppler demonstrates:

- a) normal tricuspid regurgitation
- b) moderate tricuspid regurgitation
- c) mild tricuspid regurgitation
- d) pulmonary hypertension
Case # 2
5. This is what type of prosthetic mitral valve?

O a) tilting disk
O b) ball and cage
O c) St. Jude
O d) porcine
5. This is what type of prosthetic mitral valve?

 O a) tilting disk
 b) ball and cage
 c) St. Jude
 d) porcine
6. One of the best features of this type of prosthetic valve is:

O a) durability
O b) low gradient
O c) no need for blood thinners
O d) low chance of infection
6. One of the best features of this type of prosthetic valve is:

- a) durability
- b) low gradient
- c) no need for blood thinners
- d) low chance of infection
7. By color Doppler the degree of mitral regurg in this view is:
   O a) mild
   O b) normal for a prosthetic valve
   O c) indeterminate
   O d) severe
7. By color Doppler the degree of mitral regurg in this view is:

- O a) mild
- O b) normal for a prosthetic valve
- c) indeterminate
- O d) severe
Case # 3
8. This is an asymptomatic 36 y/o male. Which is a common associated defect?

O a) atrial septal defect

O b) ventricular septal defect

O c) pulmonic stenosis

O d) L-transposition
8. This is an asymptomatic 36 y/o male. Which is a common associated defect?

- a) atrial septal defect
- O b) ventricular septal defect
- O c) pulmonic stenosis
- O d) L-transposition
9. A classic M-mode finding for this patient is:

- O a) delayed tricuspid closure
- O b) early tricuspid closure
- O c) tricuspid valve not seen
- O d) tricuspid valve seen with the mitral
9. A classic M-mode finding for this patient is:

- a) delayed tricuspid closure
- b) early tricuspid closure
- c) tricuspid valve not seen
- d) tricuspid valve seen with the mitral
10. The tricuspid regurgitation:
   - a) is mild
   - b) shows pulmonary hypertension
   - c) makes the diagnosis of Ebstein's
   - d) is underestimated in this view
10. The tricuspid regurgitation:
   O a) is mild
   O b) shows pulmonary hypertension
   ● c) makes the diagnosis of Ebstein's
   O d) is underestimated in this view
Case # 4
1. This patient's mitral valve leaflets are best described as:

- O a) normal
- O b) normal thickness but prolapsing
- O c) myxomatous but no prolapse
- O d) myxomatous with prolapse
1. This patient's mitral valve leaflets are best described as:

- a) normal
- b) normal thickness but prolapsing
- c) myxomatous but no prolapse
- d) myxomatous with prolapse
2. Based on the color flow Doppler of mitral regurgitation which leaflet(s) prolapse the most?

O a) anterior leaflet only
O b) posterior leaflet only
O c) both leaflets are prolapsing
O d) no mitral regurgitation is seen
2. Based on the color flow Doppler of mitral regurgitation which leaflet(s) prolapse the most?

- a) anterior leaflet only
- b) posterior leaflet only
- c) both leaflets are prolapsing
- d) no mitral regurgitation is seen
3. Based on this M-mode which of the following auscultatory findings might this patient present with?

- O a) holosystolic murmur
- O b) continuous murmur
- O c) click and late systolic murmur
- O d) diastolic blowing type murmur
3. Based on this M-mode which of the following auscultatory findings might this patient present with?

- O a) holosystolic murmur
- O b) continuous murmur
- c) click and late systolic murmur
- O d) diastolic blowing type murmur
4. Which of the following statements is most accurate for this image?

O a) never call MV prolapse in an apical view
O b) never call MV prolapse in an apical 4 ch view
O c) this patient has a normal mitral valve
O d) this patient needs their mitral valve replaced
4. Which of the following statements is most accurate for this image?

O a) never call MV prolapse in an apical view
● b) never call MV prolapse in an apical 4 ch view
O c) this patient has a normal mitral valve
O d) this patient needs their mitral valve replaced
Case # 5
5. This echocardiogram shows which of the following findings?

- a) dextrocardia
- b) normal TEE exam
- c) TEE with mitral valve prolapse
- d) TEE with possible aortic valve endocarditis
5. This echocardiogram shows which of the following findings?

- a) dextrocardia
- b) normal TEE exam
- c) TEE with mitral valve prolapse
- d) TEE with possible aortic valve endocarditis
6. This echocardiographic image shows:
   O a) mitral stenosis
   O b) aortic coarctation
   O c) mild aortic insufficiency
   O d) severe aortic insufficiency
6. This echocardiographic image shows:
   - O a) mitral stenosis
   - O b) aortic coarctation
   - O c) mild aortic insufficiency
   - ● d) severe aortic insufficiency
7. Which of the following statements best describe these post operative TEE images?

O a) severe mitral valve stenosis
O b) normal for an aortic prosthetic valve
O c) typical aortic dissection
O d) mild aortic stenosis with masking
7. Which of the following statements best describe these post operative TEE images?

- a) severe mitral valve stenosis
- b) normal for an aortic prosthetic valve
- c) typical aortic dissection
- d) mild aortic stenosis with masking
Case # 6
8. This parasternal long-axis image shows:

- a) possible bicuspid aortic valve
- b) classic rheumatic valve disease
- c) aortic valve endocarditis
- d) possible amyloid cardiomyopathy
8. This parasternal long-axis image shows:

- a) possible bicuspid aortic valve
- b) classic rheumatic valve disease
- c) aortic valve endocarditis
- d) possible amyloid cardiomyopathy
9. Based on this parasternal short-axis image what other cardiac abnormality would you look for?

O a) aortic dissection

O b) aortic coarctation

O c) pericardial effusion

O d) ventricular septal defect
9. Based on this parasternal short-axis image what other cardiac abnormality would you look for?

- O a) aortic dissection
- b) aortic coarctation
- O c) pericardial effusion
- O d) ventricular septal defect
10. This patient's M-mode:

- O a) is classic for a bicuspid aortic valve
- O b) demonstrates aortic insufficiency
- O c) appears fairly normal
- O d) M-mode quality is too poor to comment on
10. This patient's M-mode:
   O a) is classic for a bicuspid aortic valve
   O b) demonstrates aortic insufficiency
   ● c) appears fairly normal
   O d) M-mode quality is too poor to comment on
Case # 7
1. The bright object in the right ventricle is probably:

- O a) an artifact
- O b) a Hickman catheter
- O c) a Swan Ganz catheter
- O d) the moderator band
1. The bright object in the right ventricle is probably:

   O a) an artifact
   O b) a Hickman catheter
   ● c) a Swan Ganz catheter
   O d) the moderator band
2. Pericardial effusions occur between which two layers?

O a) fibrous and parietal
O b) serous and visceral
O c) parietal and visceral
O d) endocardium and fibrous
2. Pericardial effusions occur between which two layers?

   O a) fibrous and parietal
   O b) serous and visceral
   c) parietal and visceral
   O d) endocardium and fibrous
3. This patient's EKG might have which of the following patterns:

- O a) junctional rhythm
- O b) bundle branch block
- O c) electrical alternans
- O d) sinus arrhythmia
3. This patient's EKG might have which of the following patterns:

- O a) junctional rhythm
- O b) bundle branch block
- C) electrical alternans
- O d) sinus arrhythmia
Case # 8
4. What type of stress echocardiogram is this patient receiving?

- O a) pharmacological
- O b) exercise
- O c) Dobutamine
- O d) viability
4. What type of stress echocardiogram is this patient receiving?
   - O a) pharmacological
   - b) exercise
   - O c) Dobutamine
   - O d) viability
5. Post exercise the anterior and apical walls could be described as:
   O a) normal
   O b) hyperkinetic
   O c) akinetic
   O d) dyskinetic
5. Post exercise the anterior and apical walls could be described as:

O a) normal

O b) hyperkinetic

● c) akinetic

O d) dyskinetic
6. This would indicate a blockage in which coronary artery?

- O a) left circumflex
- O b) left anterior descending
- O c) right coronary
- O d) 1st septal perforator
6. This would indicate a blockage in which coronary artery?

- a) left circumflex
- b) left anterior descending
- c) right coronary
- d) 1st septal perforator
Case # 9
7. This “flattened” interventricular septum is primarily caused by?

- O a) atrial septal defect
- O b) volume overload
- O c) pulmonic stenosis
- O d) pressure overload
7. This “flattened” interventricular septum is primarily caused by?

- a) atrial septal defect
- b) volume overload
- c) pulmonic stenosis
- d) pressure overload
8. This problem might be a result of:

- O a) pulmonic regurgitation
- O b) pulmonary atresia
- O c) pulmonary hypertension
- O d) pulmonary emboli
8. This problem might be a result of:
   O a) pulmonic regurgitation
   O b) pulmonary atresia
   ● c) pulmonary hypertension
   O d) pulmonary emboli
9. The tricuspid regurgitation by color Doppler:
   O a) is severe
   O b) shows pulmonary hypertension
   O c) is typical for a patient with an ASD
   O d) is underestimated in this view
9. The tricuspid regurgitation by color Doppler:

- a) is severe
- b) shows pulmonary hypertension
- c) is typical for a patient with an ASD
- d) is underestimated in this view
10. The right ventricular systolic pressure is:

- a) normal for a patient with an ASD
- b) moderately elevated
- c) severely elevated
- d) is underestimated in this view
10. The right ventricular systolic pressure is:
   O a) normal for a patient with an ASD
   O b) moderately elevated
   ● c) severely elevated
   O d) is underestimated in this view