Prosthetic Valve Quiz:

1) Which one of the following valves is most likely to experience lifethreatening obstruction due to clot?

A. Bjork Shiley

B. St. Jude

C. Carpentier Edwards

D. Homograft

2) A St. Jude Mitral Valve has a pressure half time of 90 msec so it is likely to have valve dysfunction?

A. True

B. False

3) A #19 St. Jude Aortic Valve has a peak gradient of 40 mm Hg and must be stenotic?

A. True

B. False

4) A TEE is more likely to correctly identify prosthetic aortic or mitral pathology.

- A. Aortic
- B. Mitral

5) Endocarditis can occur on which of these valves?

- A. St. Jude
- B. Carpentier Edwards
- C. Homograft
- D. All of above

6) Which is most accurate in identifying valve dysfunction in a patient with a prosthetic aortic valve and heart failure?

- A. Peak gradient
- B. Mean gradient
- C. V1/V2 ratio: Dimensionless index
- D. Calculated cardiac output by Doppler

- 7) Which valve has three leaflets?
 - A. Medtronic Hall
 - B. Starr Edwards
 - C. Homograft
 - D. None of them
- 8) A peak gradient of 20 mm Hg indicates a mitral prosthetic valve is likely to have dysfunction?
 - A. True
 - B. False
- 9) A St. Jude Valve has 4 jets of regurgitation around the rim of the valve extending 1 cm into the atrium that are red on color Doppler. The patient probably has no valve dysfunction.
 - A. True
 - B. False
- 10) A baseline echo study to compare gradients when there is a question about valve dysfunction 2 years later is...
 - A. Not helpful
 - B. Somewhat helpful
 - C. Very helpful
 - D. Always necessary to diagnose valve dysfunction
- 11) The EOA of a #23 mitral valve is pi x (2.3cm/2) squared?
 - A. True
 - B. False
- 12) A current generation aortic bioprosthetic valve has a 10% failure rate at:
 - A. 5 years
 - B. 10 years
 - C. 15 years
 - D. 20 years