

HEART TO HEART: WOMEN & VALVE DISEASE

Valve Disease Quiz—Answer Key

1. **False.** Valves keep the blood moving in one direction and prevent it from leaking backwards when the heart squeezes by only opening one way, and then sealing tightly as soon as the blood passes through.
2. **False.** Valve disease is a term for a number of different diseases that affect one or more of the heart's four valves. Valve disease is more common in the aortic and mitral valves but can occur in the pulmonary and tricuspid valves.
3. **Stenosis.** Aortic and mitral valves are the most likely of the four valves to become stenotic. Aortic stenosis affects 1 in 4 women over the age of 65 and mitral stenosis is three times more common in women than men.
4. **True.** Regurgitation, or insufficiency, is one of two main types of damage seen with valve disease. Regurgitation occurs when the valve does not fully close and allows blood to leak backwards. Sometimes it is called an incompetent or leaky valve. The other type of damage is stenosis. Both regurgitation and stenosis can affect all 4 of the heart's valves.
5. **Pulmonary Stenosis.** The most common types of valve disease are:
 - Aortic Stenosis which affects 1 in 4 women over the age of 65
 - Aortic Regurgitation or Insufficiency which occurs in around 8% of women
 - Mitral Regurgitation or Insufficiency which may affect 2-3% of women
 - Mitral Stenosis which is three times more common in women than men
 - Prolapse is a type of regurgitation where the leaflets "flap" backwards and allow blood to leak and is a common cause of mitral regurgitation in developed countries.
6. **All of the above.**

Valve problems can be congenital (there at birth) or acquired later in life. Some of the most common risk factors or causes of valve disease are:

Older age – Calcium deposits can build-up on heart valves, hardening the valve and narrowing the opening. The most common risk factor for calcification is age.

Rheumatic fever – Although rare in the U.S., strep throat that is left untreated can progress into rheumatic fever, which can damage heart valves later in life. This is most common in African Americans and women.

Previous Heart Attack – Problems with the heart or vascular system can also result in valve problems. For example, heart attacks can cause scarring of the heart muscle that distorts the mitral valve. An enlarged heart can stretch open a valve and cause regurgitation—this is most common in the mitral and tricuspid valves.

Bicuspid valve – Around 1-2% of people are born with an abnormal bicuspid aortic valve—with two leaflets instead of the normal three—making it more vulnerable to damage.
7. **False.** Most types of valve disease are equally common in men and women. However, for all types, women are less likely than men to have their disease diagnosed. Research has shown that women experiencing heart disease symptoms are often misdiagnosed as having anxiety, and don't get the treatment they need.

8. **Vision Problems.** When valve damage reduces blood flow, the heart has to work harder to get blood and oxygen to the body. This can lead to a number of symptoms including, shortness of breath, severe fatigue, nausea, pressure or weight in chest, feeling that your heart is beating irregularly or skipping beats, or swelling in the ankles, feet, or belly. Many of these symptoms will only happen during activity, but as the disease gets worse they may also happen while resting.
9. **True.** People with valve disease don't always have symptoms, even if their disease is severe. For these people a heart murmur is the most important clue. The only way to really know if you have valve disease is to be diagnosed by a professional.
10. **Blood test.** Valve disease is usually first detected by listening to the heart with a stethoscope and detecting an irregular rhythm. An echocardiogram, abbreviated echo, uses sound waves to create a moving picture of the heart as it beats and provides additional information. Other tests used to diagnose valve disease include an electrocardiogram, stress test, chest x-ray and cardiac catheterization.
11. **True.** Women are more likely to ignore their symptoms and delay seeing their health care professional. They may also have their symptoms dismissed by their health care professional. As a result, women often fair worse than men because their disease has progressed further when they get treatment.
12. **All of the above.** A damaged valve may mean that not enough blood flows to the body—depriving it of oxygen. Because the heart has to work harder to get blood to the body, it can become enlarged and damaged. Valve disease can also cause blood to pool in the heart's chambers, forming blood clots that can cause a stroke. Depending on the type of valve disease, the damaged valve may prevent adequate blood flow to the body and make the heart work harder than it should. This can lead to an enlarged and damaged heart, arrhythmias (abnormal heart rhythms), congestive heart failure, stroke, other heart disease, and even death.
13. **False.** Prescribed medications can only help temporarily relieve symptoms, reduce the heart's workload, regulate heart rhythms, prevent blood clots, and prevent infections. There are no drugs that keep the disease from getting worse, undo damage that has already been done, or cure valve disease.
14. **Every 6 to 12 months.** If changes in the valve are not severe and the patient does not have symptoms, then immediate treatment is typically not needed. If a patient has significant valve disease, echocardiography is usually performed every 6–12 months to monitor the progress of the disease.
15. **True.** Surgical repair or replacement is the preferred treatment for most types of valve disease though there are alternatives for those who have conditions that make them poor candidates for surgery. Whenever possible, valve repair is performed over replacement. Risk of complications from surgery is low and survival rate for valve surgery is about 97% and above.
16. **False.** The risk of complications does rise slightly with age, but age alone is not a reason to avoid valve repair or replacement. Unless you have other serious diseases or conditions that could complicate surgery, you are most likely a good candidate—at any age.
17. **False.** Most valve patients stay in the hospital for 7 to 10 days after surgery. Patients who undergo minimally invasive procedures can expect to have shorter recovery times. There are cardiac rehabilitation programs and medication to assist in the transition back into daily routines.