



MITRAL VALVE PROLAPSE

Underwriters are often asked about the insurability of individuals with mitral valve prolapse. This is a common

entity and many people with this consider themselves to be healthy and excellent insurance risks. In this article, I will discuss valvular heart disease in general, including mitral valve prolapse.

There are four heart valves. On the right side, the tricuspid valve separates the right atrium from the right ventricle, and the pulmonary valve separates the right ventricle from the pulmonary artery in which blood flows into the lungs to be oxygenated. On the left side, the mitral valve separates the left atrium from the left ventricle, and the aortic valve separates the left ventricle from the aorta, which carries oxygenated blood to the rest of our body. In years past, it was necessary to determine the type and severity of valvular heart disease from the art of auscultation of the heart—listening with a stethoscope. Although this remains valid in skilled hands, the use of cardiac echograms has for the most part supplanted auscultation of the heart. Cardiac echoes can easily determine the type and severity of various heart murmurs, and in fact are so sensitive that they often pick up abnormalities that were not heard on examination or not suspected clinically.

Pulmonary stenosis prevents blood from leaving the right ventricle and traveling to the lungs. This is basically a congenital type of problem, and is usually correctable with surgery. The same is true for pulmonary insufficiency, which is basically a pediatric heart problem. The same is true for tricuspid stenosis. Mild tricuspid insufficiency is common in all individuals and usually does not cause significant clinical problems or underwriting concerns.

Problems involving the mitral valve and aortic valve are much more common and often have underwriting concerns. Mitral stenosis was a common problem years ago, mainly as a residual of rheumatic fever. For the most part, this has been

eradicated as the incidence of rheumatic fever has declined. However, mitral insufficiency continues to be a problem. The three main causes of mitral insufficiency are related to coronary artery disease, to dilatation of the left ventricle from cardiomyopathy and congestive heart failure, and to mitral valve prolapse. As the severity of mitral insufficiency increases, symptoms of congestive heart failure gradually develop. Atrial fibrillation occurs in severe cases. Surgery can correct the problem. Usually this involves replacing the valve with a mechanical prosthetic valve, although in some cases repair of the native valve can be accomplished. If a mechanical valve is inserted, the individual must remain on chronic anticoagulation for the rest of their life. Serial echoes can be done to follow the progression of the disease, with surgery being recommended before congestive heart failure develops.

The entity mitral valve prolapse is currently the most common cause for mitral insufficiency. This problem may be present in as much as 5% of the population. In the past, it was unclear what the long-term consequences of mitral valve prolapse were. Being able to follow individuals with echocardiograms over the years has shown the vast majority of people to have an excellent prognosis. When mitral valve prolapse occurs in a morphologically normal valve, rarely does the person develop progressive mitral insufficiency or have problems with embolization and stroke. However, there are a small proportion of people with mitral valve prolapse who have myxomatous degeneration of the heart valve. These individuals are more prone to contract infective endocarditis (hence the need for antibiotic prophylaxis with procedures such as dental work) and to worsening mitral insufficiency as time progresses. The echocardiogram can distinguish between these two types of mitral insufficiency. Most people with a morphologically normal valve have an excellent prognosis and are standard risks for both life and disability insurance. Slightly more conservative approaches may be taken in those with myxomatous degeneration.

The aortic valve may be involved by stenosis or insufficiency. This problem is increasing in prevalence. The two most common causes are a congenital bicuspid valve and thickening/calcification of the valve as we age. As we live longer, more people are developing aortic stenosis. There are many similarities to the risk factors between aortic

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stenosis and coronary artery disease. For example, elevated cholesterol is a risk factor for both of these problems. A person with aortic stenosis can suddenly develop symptoms of heart failure. For this reason, close follow up with serial echocardiograms is recommended. In this way, surgery can be performed before severe damage occurs. With the aortic valve, it can be replaced with either a mechanical valve or a bioprosthetic valve made from animal tissue. With a bioprosthetic valve, aggressive anticoagulation with Coumadin is not necessary. It is important for agents to realize that in individuals who are 65 years of age and older and who have aortic valve replacement with a normal ejection fraction, they approach a normal life expectancy.

The last entity I will discuss is that of aortic insufficiency. The two main causes are bicuspid aortic valve and hypertension. As such, the prevalence of aortic insufficiency also increases with advancing age. With the widespread use of echoes, mild degrees of aortic insufficiency have been discovered frequently in older individuals. These mild degrees of aortic insufficiency are probably insignificant and have little impact on longevity or underwriting considerations. As with other valvular heart problems, individuals with more severe aortic insufficiency can

be followed with serial echocardiograms. In this way, surgery can be performed before serious consequences develop.

To summarize, the face of valvular heart disease has changed dramatically over the last 25-35 years. We no longer see mitral stenosis. We do see more mitral insufficiency related to mitral valve prolapse, but the majority of these have a good prognosis. Adverse underwriting decisions should not occur in such cases. With advancing age, we are seeing more aortic insufficiency and aortic stenosis. Echocardiograms can easily separate the mild cases from the more severe. Even in severe cases, aortic valve surgery can give excellent results with some individuals having normal life expectancy after successful surgical repair. From the underwriting standpoint, the most important aspect is to understand the severity of the valvular heart problem. This can be done by analysis of the echocardiograms in the attending physician's statement. Most cases are insurable, many at standard rates.

I would be happy to discuss any of these matters with you. Please feel free to contact me about this article or any other questions that you may have.