



by Donald Victorson, CLU

## UNDERWRITER:

Defined as someone sitting  
in an ivory tower 900 miles  
from here, trained to say,  
"NO."

## YOUR JOB:

To convince that  
underwriter, with truthful  
information, presented in  
as favorable a light as  
possible that it is desirable,  
even possible to say  
"YES."

Aortic valve replacement is an open-heart surgical procedure to treat the narrowing (stenosis) or leakage (regurgitation) of the aortic valve in the heart.

The heart has two sets of chambers. The right-side chambers pump blood to the lungs. The left-side chambers pump blood to the rest of the body. The main pumping chambers of the heart are the ventricles, and they must have both an inflow valve and an outflow valve. The aortic valve is the outflow valve on the left side of the heart; it opens to permit blood to flow from the left ventricle, and closes to prevent the blood from flowing backward into the heart.

## What causes aortic valve problems?

Commonly 1%-2% of infants are born with a bi-cuspid aortic valve. A normal aortic valve has three leaflets to control the flow of blood. A bi-cuspid aortic valve has only two leaflets, which may function normally for years before narrowing (stenosis) or leakage (regurgitation) necessitates a surgical repair.

With aging, even a normal aortic valve may become calcified. When the valve becomes worn, calcium deposits may build up causing either stenosis or regurgitation, or both.

## What are the symptoms of aortic valve disease?

With stenosis, the heart must work harder to pump sufficient blood through the aortic valve to the body. With regurgitation, the leaky valve lets blood flow back into the heart after it has been pumped out. Either way, the extra work may cause symptoms of heart failure including shortness of breath and swelling of the lower extremities. The extra work that the heart must perform may also cause chest pain (angina), dizziness, or even loss of consciousness.

## Can a diseased aortic valve be repaired?

The aortic valve can be repaired. In most cases it must be replaced with one of the following:

**MECHANICAL VALVES** are today extremely durable. They rarely wear out. Unfortunately, all mechanical valves tend to clot, causing an embolism or a stroke; therefore anticoagulants such as Coumadin must be taken for the rest of the patient's life.

**BIOLOGICAL VALVES** made from pig aortic valves, or taken from human cadavers are much less likely to cause a blood clot. Unfortunately, they are much less durable. In time they may wear out.

The latest advance in biological valves includes moving the patient's pulmonary valve to the aortic position and building a new pulmonary valve from the patient's own tissue.

**In order to evaluate the insurability of someone with a history of aortic valve surgery, you need to ask the following important questions:**

*Does the client currently smoke?*

Smoking is considered to be a major risk factor for every kind of cardiac disease problem. It has a dramatic impact on life expectancy. While it is best to never have smoked, even those who did smoke, and who have quit smoking enjoy a much better survival rate than those who continue to smoke.

*When was the need for aortic valve surgery diagnosed and when was the surgery performed?*

Once the condition has been positively diagnosed and the need for surgery confirmed, the sooner it is performed, the sooner additional heart damage can be contained. Following surgery, the client is not insurable for at least six months. Thereafter, rated offers should be available with the offers improving with the passage of time following surgery.

*What current medications is the client taking?*

Use of anticoagulants (blood thinners) is usually required where any prosthetic device or foreign tissue is implanted to minimize the risk of blood clots or rejection.

*Has the client any other cardiac or non-cardiac health problems?*

Mortality is severely and negatively impacted when there is also a history of *arrhythmia, heart enlargement, high blood pressure, angina, or decreased heart function*. Likewise, a history of *kidney disease, or diabetes*, for example, will adversely impact the likelihood of receiving a favorable underwriting offer.

*Is the client involved in any form of cardiac rehabilitation or undergone any lifestyle changes?*

Lifestyle changes such as quit smoking, exercise, lose weight, diet, and stress reduction are major components in any cardiac rehabilitation program. They are also very important in risk management.