IMPAIRED RISK
REFERENCES
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Underwriting Aortic Valve Disorders

THE CASE STUDY FOR THIS MONTH

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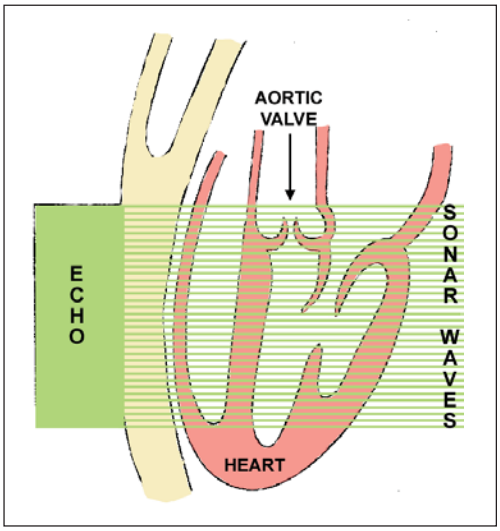
A 60 year-old woman is looking for $750,000 of term life insurance. She has been aware of a heart murmur over the last two years but has had no symptoms. The attending physician statement (APS) refers to an echocardiogram (echo) showing a sclerotic aortic valve with no aortic stenosis. Exam reveals all other factors are preferred plus including build, blood pressure (BP) and cholesterol.

The aortic valve is the structure that leads out of the heart to the aorta. Normally it keeps blood from flowing backward when the heart relaxes. Abnormalities are common and are present in one-forth of those over the age of 65. It is even more common in the elderly. For this reason, it is frequently encountered during the underwriting process.



The aortic valve is studied whenever an echo report is obtained. An abnormal aortic valve can cause *stenosis* (blockage of blood flow from the heart) and/or *regurgitation* (blood flow back into the heart, also called *insufficiency*). These occurrences put extra strain on the heart and can lead to conditions such as arrhythmias, clots, heart valve infections or cardiac enlargement.

The aortic valve becomes diseased because of two main reasons: 1) the valve can be malformed from birth, as is the case of a bicuspid aortic valve; and 2) the valve can be injured as a result of an illness such as rheumatic fever. These conditions, even if they are mild, can progress and lead to heart failure or the need for valve replacement. As a result, ratings are usually necessary even for mild abnormalities. When aortic *stenosis* or *regurgitation* is mild the risk is usually Table Two. If the disorder progresses and becomes moderate the risk is higher. The amount the risk increases depends on the rate of progression. Severe cases are usually declined.

The aortic valve abnormality called **sclerosis**, as referred in the case study, is a process of hardening of the valve. It can be described as "thickening" on the echo report (see illustration). This condition can cause the valve leaflets to stick and prevent them from opening normally, causing the blockage of blood flow out of the heart (*stenosis*).

The **sclerosis** of this valve can also be an indication of other blood vessel problems. Recent medical information shows that when aortic valve **sclerosis** is present, there is an increased risk of coronary heart disease with its associated heart attacks and heart failure. The blockage caused by **sclerosis** is similar to the blockage that occurs in coronary heart disease. In valve **sclerosis** and coronary *stenosis* the narrowing is caused by inflammation, cholesterol, and sometimes deposits of calcium.

In this case study, because the woman has **sclerosis**, the likely assessment would be standard plus. There is a 30 percent chance she will develop aortic *stenosis* and a 40 percent chance she has coronary artery disease. The offer could be better with a good exercise test or a longer track record (five years) showing no evidence of these problems.

Legal & General