HEART DISEASE—AORTIC STENOSIS

Overview:

Aortic stenosis is a narrowing of the aortic valve opening, causing obstruction of the flow of oxygenated blood into the circulatory system. This condition forces the heart to work harder and causes the left ventricular muscles to thicken over time. The most common cause for aortic stenosis is deposition of calcium on the aortic valve, a condition typically associated with *atherosclerosis*. Sometimes the condition is congenital. Cardiomyopathy, or heart muscle disease, can also cause aortic stenosis, especially when the condition leads to thickening of the heart muscle around the aortic valve.

Many individuals with aortic stenosis experience no symptoms. They are often surprised to learn of the condition following a routine exam that included the detection of a *heart murmur*. Specific diagnosis is made via EKG, echocardiogram, catheterization, or chest X-ray. Individuals who experience symptoms report shortness of breath, fainting spells, chest pain on exertion, and breathing difficulty. Severe aortic stenosis may be treated with valve replacement surgery.

Impact on Life Underwriting:

Aortic stenosis is evaluated based on the severity of the condition, the age of the proposed insured at diagnosis and currently, and the cause of the condition. Mild cases, especially those due to congenital defects that are unlikely to accelerate rapidly, can sometimes be insured at standard rates, although low tables are common. Degenerative cases of aortic stenosis may require valve replacement surgery. These cases are highly rated or postponed, depending on the likelihood and timing of possible valve surgery. SB 04/20/2001

Aortic Stenosis Classification

	Mild	**Moderate**	**Severe**
Patient reported symptoms	None	Usually none	Chest pain, light headedness, breathlessness
Electrocardiogram findings	Often normal; sometimes of high voltage or minor T-waves.	High voltage with minor to major T-waves.	High voltage with minor to major T-waves; ST depressions.
Heart enlargement	None to 15%; left ventricular hypertrophy	None to 25%; pulmonary congestion	Heart enlarged 26% or more
Echocardiogram indicates left ventricular function to be:	Normal	Normal	Decreased
Echocardiogram indicates left ventricular wall thickness is:	1.1 cm or less	1.2 to 1.5 cm	1.5 cm and up
Echocardiogram indicates valve orifice to be:	1 cm^2 to 1.5 cm^2	.75 cm^2 to .99 cm^2	.74 cm^2 or less
Echocardiogram indicates valve gradient to be:	20 mm to 40 mm	41 mm to 80 mm	81 mm or higher

Aortic Stenosis Approximate Rating Schedule

Age	**Mild**	**Moderate**	**Severe**
0 - 19	Table 4 - 8	Table 8 - 16	Decline
20 - 39	Table 2 - 6	Table 6 - 12	Decline
40 - 59	Table 2 - 4	Table 4 - 8	Highly Rated - Decline
60 and up	Standard - Table 4	Table 2 - 6	Highly Rated - Decline