HEART DISEASE—IRREGULAR HEART BEAT

Overview:

Any irregular heart beat is called an *arrhythmia*. Some types of arrhythmia are quite common - they show up in about 1% of EKGs in the general population. Temporary arrhythmias can be caused by emotional stress, exercise, surgical procedures, some medications, and significant alcohol consumption. Many of these forms of arrhythmia are of no long term significance. Other forms of arrhythmia, those that are persistent (chronic), are found almost exclusively in the presence of more serious heart or lung disease, or in alcoholics. Chronic arrhythmias are correlated with significant premature mortality.

Impact on Life Underwriting:

Key to estimating likely underwriting action is the determination of the type of arrhythmia diagnosed for a proposed insured, and the presence of any complicating variables (i.e. related disease). Many cases of arrhythmia are underwritten on a standard basis. However, some arrhythmias, especially those caused by underlying heart disease, will lead to high ratings or declines. Following is a discussion of some types of arrhythmias and their impact on life underwriting.

Ectopic beats, extrasystoles, or premature contractions, are heart beat irregularities of little concern, especially if the are shown to be stable or decrease with exercise and are observed in proposed insureds without previous heart attack or other impairment. Ratings for these irregular heart beat range from standard to Table 4, depending on frequency and form, whether they stay the same, decrease, or increase with exercise (increase being on the higher end of the rating scale) and whether an electrocardiogram is available (a two-table reduction may be available for a rated case if an otherwise unremarkable electrocardiogram is available).

Atrial fibrillation, or flutter, is classified as being *paroxysmal* (intermittent) or *chronic* (permanent). A single episode of atrial fibrillation, or a few episodes per year, absent other definable impairments, show no significant extra mortality and thus lead to standard rates with many companies. *Chronic atrial fibrillation*, with or without identifiable other medical impairment, show markedly increased mortality. The concern for those without related impairment is their heightened risk for the development of blood clots and resulting strokes (thus, many such individuals are given blood thinners to decrease that risk). Table 3 and 4 rates are to be expected for individuals with chronic atrial fibrillation without related impairment. Many forms of *chronic atrial fibrillation* are caused by underlying disease, including mitral valve stenosis, cardiomyopathy, hyperthyroidism, fever, or alcoholism. Significant risk of premature mortality is associated with these some of these conditions and many such cases are highly rated or declined.

Ventricular tachycardia, a potentially fatal arrhythmia, sometimes is treated by an implanted *defibrillator*. This device is a small electric generator that has three wires. When it detects a racing heart beat, an electric shock is produced that stops the heart for a split second. The goal of this shock is to give the sinoatrial node, the original of electrical impulses that regulate heart beat, sufficient time to "reset" itself to a normal heart beat pattern. Ventricular tachycardia is either very highly rated or declined for individual coverage, as are almost all cases controlled by means of a defibrillator.

Premature atrial contractions (PACs), also referred to as premature supraventricular contractions, arise in the upper heart chamber (the atrium) and are not typically of concern. Standard rates are common. *Premature ventricular contractions (PVCs)* originate in the lower primary pumping chamber of the heart, the ventricle. These are of greater significance than PAC's as they are often caused by disease and because they involve the main pumping chambers of the heart. Ratings of standard are still possible, especially for younger individuals with less tan 20 unifocal PVCs per minute, without underlying heart disease, and without a history of ventricular tachycardia. Ratings will be higher for other types of PVCs and for those caused by underlying disease. Declines are not infrequent.

Sinus arrhythmia is a condition in which heart beats increase during inhalation of air and decrease while exhaling. This condition is most frequently observed in athletes and is usually of no concern. Preferred or standard rates are common, unless there is underlying disease. As with all cardiovascular risks, please help us preunderwrite your case by completing the appropriate questionnaires, including our Search for Underwriting Credits fact finder. SB 04/20/2001