HEART DISEASE TREATMENT—BYPASS

Overview:

Coronary Artery Bypass Grafts (CABG) are surgical procedures designed to bypass one or more obstructed blood vessels that transport oxygenated blood from the aorta to various parts of the heart muscle. Approximately 1,600 individuals undergo coronary bypass surgery in the United States each day; a significant percentage of these procedures are repeat surgeries for patients who had their initial intervention over a decade ago.

Bypass surgeries are often necessitated by severe chest pains (angina) not otherwise treatable. These chest pains usually arise when a certain part of the heart muscle is deprived of a sufficient flow of oxygenated blood. Today, bypass surgeries are done primarily if less invasive procedures, such as angioplasty (PTCA), are not likely to be successful or have failed.

There are two main types of bypass surgery. In the older method, used primarily from the 1960s through the mid 1980s, saphenous veins were transplanted from the leg to bypass or replace the diseased coronary vessel(s). The vein bridged the gap between the oxygen supplying aorta and the coronary artery behind the blockage. Unfortunately, saphenous veing grafts led to a relatively high occurrence of reblockages.

Since the mid 1980s, left internal mammary artery (LIMA) grafts have largely replaced saphenous vein grafts when bypassing the left anterior descending coronary artery (LAD). With this type of procedure, one end of the LIMA is freed from the chest wall and attached to the LAD beyond the area of obstruction. Use of the mammary artery has increased long term survival rates significantly. Saphenous vein grafts are still used for multiple vessel bypass surgeries.

In order to provide the greatest long term benefit from open heart surgery, doctors will attempt to bypass any narrowing(s) in any major arteries and their branches. As many as six separate grafts between the aorta and blocked coronary arteries may be attempted during a single bypass surgery.

Today, most bypass surgeries are completed with a two day stay in the hospital's intensive care unit. Patients are discharged from the hospital as soon as a week, and sometimes less, after the surgery. The time it takes for full recovery and return to an active lifestyle depends on the type of surgery performed as well as the age and general health of the patient.

Impact on Life Underwriting:

A highly successful bypass surgery can restore significant functionality to the heart. Nevertheless, the 30 day post operative mortality rate is still about 6%; this doubles to 12% during the first post-operative year. Graft closures also remain a concern for the period immediately following surgery. During the first year, graft closures are typically due to thrombosis (clotting). Graft occlusion after the first year are due to fibrosis or the progression of atherosclerotic disease in the arteries to which the graft is attached.

Life underwriters will consider the following surgery specific variables: (a) the number of vessels bypassed; (b) the type of vessel used for the bypass; (c) the techniques employed for the surgery; (d) the degree of post operative left ventricular functioning; (e) the absence or presence of post-operative electrical instability; (f) the degree of ischemia brought on by stress; (g) and the likely rate of progression of the atherosclerotic disease process.

Offers of life insurance are typically postponed for at least three months post surgery. Many surgeries warrant postponement of closer to six months and the best offers will not be available for a year following the procedure. As with all cardiovascular underwriting, offers of insurance can be significantly enhanced by providing favorable information along with the application. Please complete our "Bypass" as well as "Search for Underwriting Credits" questionnaires. SB 04/23/2001