

Overview:

In addition to the traditional bypass surgery, many modern therapeutic devices have come to market in the last 15 to 20 years to treat certain forms of Coronary Heart Disease (CHD). Percutaneous Transluminal Coronary Angioplasty (PTCA) is one such medical procedure, with the first one performed in a human being in 1977. Initially angioplasty was reserved for those with single vessel disease. However, PTCA is now also used on patients with multiple vessel disease. Three vessel angioplasties are now quite common.

At this time about 200,000 angioplasties are done each year throughout the medical centers of the United States (this compares to about 300,000 bypass surgeries). Angioplasty has become popular as it often requires shorter hospital stays and provides for less pain to the patient; often a patient can be released from the hospital within a few days of the procedure. It has an *initial* success rate of 90%. There is only a 1% chance of infarction as a result of the procedure; the need for immediate bypass is also limited to about 1%. Mortality is less than 1/2 percent in experienced medical centers. Finally, PTCA is less costly than traditional bypass surgery.

Basically, PTCA is a surgical procedure that involves inserting a catheter through a skin incision into an artery (typically starting in a leg) and moving the catheter up to the coronary artery. Once in the desired location (an area of the artery obstructed by plaque) a balloon like apparatus attached to the end of the catheter is inflated several times, each time with increasing pressure. This inflation dilates (stretches) the affected artery wall, allowing a greater amount of blood to flow through the vessel even without removal of the plaque. Some fracturing of the plaque is also common, leading to small dissections, further enhancing blood flow.

Various attempts have recently been made to improve the long term results of PTCA. One popular procedure involves the insertion of stents at the site of the obstruction(s) to prevent restenosis. These stents consist of expandable coils, tubes, or mesh that press against the plaque (and indirectly against the artery walls) in an attempt to prevent reblockage. Unfortunately, within six months, almost 1/4 of all stents are completely occluded and over 1/3 show significant blockage that warrants a repeat or alternate procedure.

Rotational atherectomy is another new procedure frequently done with PTCA. With this procedure, a high speed diamond chip coated element is inserted into the affected artery to scrape away some of the atheromatous plaque. The resulting plaque particles are smaller than blood cells and thus are of little concern. The initial success rate is high for rotational atherectomy, but unfortunately reblockage occurs in 41% of individuals who have the procedure.

Impact on Life Underwriting:

PTCA is not a perfect procedure. The natural healing process of the dilated artery causes a reblockage (restenosis) of the artery in 25% to 60% of patients. A 35% restenosis rate is the most common, absent complicating variables. Most of the reblockages occur during the first two to four months following PTCA. Thus, most insurance company medical directors prefer to wait until six months after the PTCA procedure before making offers.

Given the relatively low reblockage rates after the first six months following PTCA, standard rates or very low table ratings are often available to individuals with treated single vessel disease. The medical report must document excellent follow up studies and otherwise favorable prognostic indicators (i.e. absence of previous scarring due to heart attacks, no remarkable family history, no compounding medical conditions, good dietary habits, and positive lifestyle choices, etc.).

As with all cardiovascular underwriting, documentation of positive information can lead to substantial underwriting improvements, often leading to a reduction of several tables. Sending in an application “to see what happens” without proper case preparation does not normally lead to the best possible underwriting outcomes. In order to minimize any ratings for your cardiovascular risk, please be sure to complete our “Angioplasty” and “Search for Underwriting Credits” questionnaires as much as possible. SB 04/23/2001