What the coronary artery by-pass graft process entails

Health & Medicine



The paper " What Does the Coronary Artery Bypass Graft Process Entail?" is an informative example of a term paper on health sciences & medicine. The surgical procedure is known as the coronary artery bypass graft (CABG) is useful to patients as a treatment for coronary heart diseases. This procedure happens with the aim of improving the flow of oxygenated blood to the heart muscles and it remains to be one of the most common heart surgical processes in the world (Mitchell, Ratnatunga, Fairhead & Malone 2008). This paper focuses on creating an understanding of Coronary artery bypass grafting (CABG), and to show what the CABG process entails through a summary of the procedure and how it works.

People with coronary heart disease accumulate fat in the artery walls as a result of their eating habits or lack of physical exercises. This situation is dangerous as can result in clogging of the arteries with fat resulting in death. Consequently, the walls of the arteries get crowded making the flow of blood to the heart reduced causing a reduction of the amount of oxygen supplied to the heart muscles (Kim, Eagle & Guyton, 1999). To save the lives of these people, they have to go through the coronary artery bypass grafting process so as to create alternative routes through which blood flows to produce oxygen to the heart muscles.

The process of coronary arteries bypass grafting starts by first fixing a heart and lung machine to the patient, to act as a medium of circulating blood around the body. Secondly, the surgeon cuts the graft to use as a bridge of blood transportation. This artery can be cut from another part of the body like the arm, leg or the chest walls. He then makes a cross-section cut through the chest to the affected part of the arteries and identifies the parts to make the diversion cuts. The surgeon makes holes before the narrowed area on the artery and another one after the narrowing. These are the points where the graft of the artery will fit to allow diversion of blood from the narrow path to the wide vein path for efficient flow (Mitchell, Ratnatunga, Fairhead & Malone 2008). The procedure takes a period of between three and five hours, depending on the number of arteries under consideration. After completion of the operation, the heart and lung machine need to be put off to allow the patient's heart to beat normally on its own, and the blood flow to return to normal. In addition, a temporary pace maker may be attached to the patient, to help regulate the rhythm of the heart beat. Later, the patient will be taken to a Cardio-Thoracic Critical Care Unit (CTCC) for intensive nursing care. After one to two days later, the patient can be transferred to the wards and kept under monitoring and eventually after six days, the patient is ready to leave the hospital.

Like any other operation, the coronary artery bypass process carries with it risks of complications that can be determined by the patient's age, gender, the urgency of the operation, weight, health status and habits such as smoking. These risks are dangerous as they could result in death, anemia, stroke, heart attacks, irregular heartbeats and development of wounds and other infections in the chest, leg or arm among others (Sakwa P., Emer R., & Shannon, F. L., 2009). As a result, before the operation happens, the consent of the parties in the operation has to be obtained through the signing of documents.

In conclusion, the coronary artery bypass grafting has become famous as a

savior to many patients of heart diseases. However, it is necessary to note that, the procedure is a design to increases the flow of blood to the heart muscles but does not remove the risk of future attacks. Therefore, it is beneficial for an individual, who has undergone the process to change his or her lifestyle, with the aim of reducing the risk of further complications.