

# Coronary artery bypass graft surgery (cabg)



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Coronary Artery Bypass Grafting (CABG) Coronary artery bypass grafting, abbreviated CABG, is a kind of surgery that enhances the flow of blood flow to the heart in people suffering from coronary artery disease, also known as severe coronary heart disease (CHD). CHD is caused by the accumulation of plaque, a substance that constitutes of calcium, cholesterol, fat and other blood substances (Nih. gov, 2010). Diabetes, high blood pressure, smoking, old age (over 55 years for women and over 45 years for men), elevated cholesterol, among others can accelerate the accumulation of plaque. This substance blocks/narrows the coronary arteries thereby decreasing the blood that flows to the heart muscle. Severe blockage can lead to heart attack, shortness of breath, and chest pain or discomfort/angina. One way in which CHD is treated is through CABG, whereby a cardiothoracic surgeon grafts/connects a healthy vein/artery from the body to the obstructed coronary artery. The grafted vein/artery bypasses the coronary artery's obstructed portion, which forms a new passage, and the surgeon routes oxygenated blood around the obstruction to the heart muscle (Nih. gov, 2010). Parks explains that a bypass usually involves open-chest surgery as well as making use of a heart-lung bypass machine for circulating blood and oxygenating it. He gives a number of newer, bypass surgery methods that are less invasive and that can be used in place of open-chest surgery in some cases. One such technique entails the use of minimally invasive procedures/keyhole procedures in place of open-chest surgery. Keyhole procedures involve the use of a number of smaller chest openings and they may not or may call for the use of a heart-lung machine. In procedures where a heart-lung bypass machine is not used, medicine is used to slow the heart although it continues beating during the process (Parks, 2009). The

aim of CABG is to alleviate angina in patients who are not good angioplasty (PTCA) candidates and have failed medical therapy. It is best for those patients with multiple narrowings in various branches of the coronary artery, such as is evident in diabetes patients. In patients with considerable multiple arteries' narrowing, especially those with reduced heart muscle pump function and in patients with considerable left main coronary artery narrowing the surgery has been proved to enhance long-term survival. Overall death connected with CABG is 3 to 4 percent. Heart attacks also occur in 5 to 10 percent of patients during and soon after surgery and are the major death causes. Roughly five percent of patients have need of exploration owing to bleeding (Kulick 2011). References Kulick, Daniel (2011). Coronary Artery Bypass Graft Surgery (CABG). Retrieved from [http://www.medicinenet.com/coronary\\_artery\\_bypass\\_graft/article.htm](http://www.medicinenet.com/coronary_artery_bypass_graft/article.htm) Nih.gov (2010). Coronary artery bypass grafting. Retrieved from [http://www.nhlbi.nih.gov/health/dci/Diseases/cabg/cabg\\_what.html](http://www.nhlbi.nih.gov/health/dci/Diseases/cabg/cabg_what.html) Parks, Robin (2009). Coronary artery bypass graft (CABG) surgery. Retrieved from <http://www.webmd.com/heart-disease/coronary-artery-bypass-graft-cabg-surgery>