

Introduction

The left main coronary artery, which subdivides into the left anterior descending and the left circumflex arteries, is the major source of blood flow to the interventricular septum and the left ventricular free wall. Because of the crucial role of the left main coronary artery in the left ventricular blood supply its obstruction lead to severe haemodynamic deterioration resulting in less favorable prognosis(*Yamaji et al., 2001*).

Total occlusion of the left main coronary artery is a rare clinical entity, it carries a very high mortality rate (*Yip et al., 2001*). However survival is possible if the patient reaches the hospital in time (*Kanjwal et al., 1999*).

It is generally agreed that obstruction of the left main coronary artery (LMCA) is a malignant lesion in patients with ischemic heart disease. Sudden death, massive myocardial infarction and ventricular arrhythmias are frequently associated with this lesion (*Califf et al., 1984*)

The left main stenosis has been found to be the most prognostically important single lesion involving the coronary arteries (*Ellis et al., 1997*).

The presence of left main coronary arterial narrowing almost always implies significant disease in other branches of the coronary tree. Because of the large amount of left ventricular myocardium subserved by the divisions of the left main artery, and because of the presence of multiple additional lesions it might be speculated that myocardial infarction caused by occlusion of the left main trunk would be potentially

catastrophic more often than other forms of myocardial infarction (*Shawl et al., 1989*).

Suspecting left main coronary artery disease is important before catheterization, because coronary arteriography in patients with left main coronary disease is more hazardous, with mortality reported to be as high as 25%. With increased awareness of this risk, systemic heparinization, nonselective initial visualization of the left main coronary artery and occasional use of the intra-aortic balloon pump, there have been no deaths within 24 hour of catheterization since 1984 (*Boehrer et al., 1992*).

Panovsky et al., (1997) stated that recognition of patient with possible left main coronary artery disease (LMCAD) prior to catheterization has led to a much lower death rate related to diagnostic catheterization and help to select appropriate treatment strategy.