

CASE REPORTS

Left main coronary angioplasty – A case report

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Abstract

A 52 years lady presented with chest pain and shortness of breath . Chest pain was initially CCS class II and gradually CCS class III. Coronary angiogram reveals triple vessel disease for which she underwent CABG (RSVG to LAD) in December 1999. On January 2003 PTCA with stent (sirolimus – 3 x 15m) to LCX was done. She again complains of chest pain after a short symptom less period . Recent coronary angiogram revealed TVD with left main involvement. In this article we will describe a rare case of successful stenting in left main disease.

Introduction

Ballon angioplasty for left main coronary artery disease was regarded as a contraindication due to technical difficulties and increased mortality¹. However recent improvements includes new designed stents, debulking procedures, use of effective antiplatelet agents have made PCI a possible alternative for the treatment of left main coronary disease (LMCD). Protected LMCD angioplasty is regarded as safe with high success rate and has become a generally accepted alternative to CABG². O'Keefe et al . report a 90% three year survival although the actual restenosis rates are uncertain³. The increased elasticity of the left main has lead to concern regarding long term results⁴. In this article we will describe a rare case of successful stenting in left main disease.

Case report

Mrs R. L 52 years old pleasant lady presented with chest pain and shortness of breath. She had been suffering from these symptoms for the last seven years. The chest pain was initially CCS class II and gradually it becomes CCS class III. Coronary angiogram revealed triple vessel disease (TVD).for which she underwent CABG (RSVG to LAD) in December 1999. She was symptom less for three years and then she again had of chest pain. On January 2003 PTCA with stent (sirolimus – 3x15 mm) to LCX was done. After this procedure she passed a symptom less period and after one year she again complains of some problem. In the meantime she

underwent frequent medical consultation. She was on anti-hypertensive and insulin. She was also following medications:

Simvastatin, fenofibrate, clopidogrel, carvedilol, trimetazidine, diltiazem and combination of frusemide with K + spairing diuretic. Her ECG showed down slooping ST depression in anterolateral lead. Echocardiography examination revealed no regional abnormality with good LV systolic function. Exercise tolerance test was positive before CABG but recently no stress test was performed. Recently coronary angiogram was done and revealed TVD with patent RSVG to LAD graft and significant stenosis in LMCA and proximal LCX. Elective PTCA and stenting to LMCA & proximal LCX was done in Z.H. Sikder Cardiac Care and Research Centre, Gulshan, Dhaka, Bangladesh.

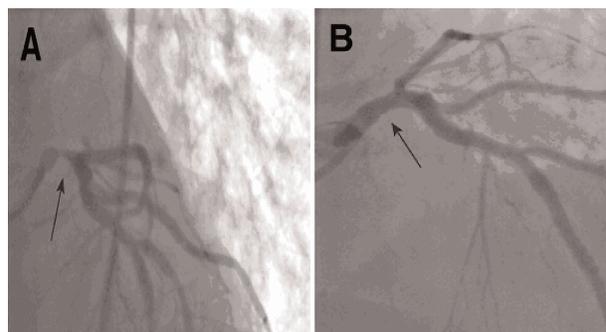


Figure of left main PCI

Discussion

Left main coronary artery disease (LMCD) is defined as > 50 %.

Left main narrowing usually characterized by symptoms of unstable angina sometimes with hemodynamic compromise, diffuse ST depression in inferior and precordial leads on ECG and poor prognosis due to sudden death and massive infarction. Coronary arteriography is the current “ gold standard “ for evaluating the severity of a coronary stenosis and usually expressed in percent diameter stenosis ⁵. CABG is the first line therapy while PCI is emerging as a possible alternative to surgery.

Left main coronary artery lesion carry an ominous prognosis. PTCA has been offered to patients with left main disease who are thought to be inoperable and a patent bypass graft to one of its limbs; so-called “protected” left main angioplasty. Patients considered to be poor surgical candidates have been offered intracoronary left main stenting as a compassionate alternative. These patients tend to be in poor general health and therefore higher complications are expected. In a multi centre trial of left main stenting in non surgical patients reported by Ellis et al. the hospital mortalities was 9.7 % and the six month mortality was 17.8 % ⁶.

Conclusion

Ballon angioplasty and stenting in left main is feasible and can be performed in selected patients. The new invasive strategy can be done in protected left main coronary artery in a high risk patient (unstable angina, advanced age etc).

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