## **Original Paper**

## Clinical outcomes of patients with isolated atherosclerotic lesion of proximal left anterior descending coronary artery who underwent coronary angioplasty with stenting

Yahya Dadjou (MD)\*<sup>1</sup>, Hamid Reza Taghipour (MD)<sup>2</sup>, Davoud Kazemi Saleh (MD) <sup>3</sup> Yashar Moharamzad (MD) <sup>4</sup>, Mojtaba Hashemzadeh (MD) <sup>5</sup>

<sup>1</sup>Assistant Professor, Department of Cardiology, Baqiyatallah Hospital, Baqiyatallah University of Medical Sciences, Tehran, Iran. <sup>2</sup>Assistant Professor, Department of Cardiology, Baqiyatallah Hospital, Baqiyatallah University of Medical Sciences, Trauma Research Center, Tehran, Iran. <sup>3</sup>Associate Professor, Department of Cardiology, Baqiyatallah Hospital, Baqiyatallah University of Medical Sciences, Tehran, Iran. <sup>4</sup>General Physician, Baqiyatallah University of Medical Sciences, Trauma Research Center, Tehran, Iran. <sup>5</sup>Thoracic Surgeon, Baqiyatallah University of Medical Sciences, Trauma Research Center, Tehran, Iran.

## **Abstract**

**Background & Objective:** The atherosclerosis of left anterior descending (LAD) coronary artery because of subtending more than 50% of left ventricular myocardial mass, has long been the focus of concern regarding appropriate treatment. This study aimed to evaluate efficacy of Percutaneous Transluminal Coronary Angioplasty (PTCA) with stenting for treatment of proximal LAD disease.

**Materials & Methods:** In this descriptive study, 75 patients with isolated proximal LAD atherosclerotic lesion treated with PTCA and stenting were followed up for 9 months. The stenosis of all patients was documented by coronary angiography prior to enrollment. Exercise tolerance testing (ETT) by Bruce protocol was performed before angioplasty and at the end of follow up period as well.

**Results:** There were 44 (58.7%) males, and 31 (41.3%) females. The mean age of patients was 59.4 (range, 39 to 83 yrs). Clinical outcomes of 73 (97.3%) patients were satisfactory. Only two patients developed re-stenosis during the follow up period. The first patient developed myocardial infarction at the 3rd day of her admission, and the second one had an abnormal ETT after 9 months. Percutaneous coronary revascularization with stenting was performed, and both of them were discharged without any problem.

**Conclusion:** This study demostrated that the nine months prognosis of patients with isolated stenosis of proximal LAD coronary artery that treated by PTCA and stenting was acceptable. This treatment improves clinical status and results in lower hospital adverse event rates and in appropriate clinical outcome.

**Keywords:** Ischemic heart disease, Left anterior descending coronary artery, Coronary angioplasty, Stent

\_\_\_\_\_

\* Corresponding Author: Yahya Dadjou (MD), E-mail: yasharpop@hotmail.com

Received 1 Oct 2007

Revised 24 May 2008

Accepted 23 Jun 2008