Case Report

Septalendarterectomy in Multifocal LAD Disease: A Rare Case

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Abstract
In the coronary artery bypass surgery residual coronary lesions due to incomplete revascularization of multifocal or diffuse lesions might increase perioperative mortality and morbidity. Coronary artery endarterectomy might improve postoperative outcome in the multisegment coronary artery disease. In this article, we are presenting long segment left anterior descending (LAD) artery endarterectomy including long segment septal artery endarterectomy in a patient with multifocal and long segment LAD disease.

ABBREVIATIONS
LAD: Left Anterior Descending Artery; Cx: Circumflex Artery

INTRODUCTION
Complete revascularization of myocardium might be difficult with conventional bypass techniques in the patients with diffuse or multifocal left anterior descending artery (LAD) disease [1]. In these condition, coronary endarterectomy is a surgical alternative to gain perfusion of whole ventricular myocardium. In this article we are presenting long segment endarterectomy of LAD artery with including septal artery in a patient with diffuse coronary artery disease.

CASE PRESENTATION
A 63-year old male patient admitted to hospital with angina pectoris. His cardiac enzymes were elevated. In the urgent coronary angiography % 95 long segment proximal LAD stenosis were revealed (Figure 1a). There was a 1.5 mm diameter long septal artery and proximal of this septal artery was included by LAD disease. Ejection fraction was 55%, there was no additional cardiac pathology in the echocardiographic examination and coronary artery bypasses to LAD and circumflex artery (Cx) was planned. During the surgery, after Cx artery bypass with saphenous vein, arteriotomy was done proximal part of LAD. Arteriotomy was extended proximally and distally. Atheromatous plaque was dissected from adventitia and coronary endarterectomy was performed to LAD and 1st septal arteria (Figure 1b). LAD was reconstructed with longitudinally incised LIMA. The patient was discharged from the hospital without any complication at postoperative 6th day.

DISCUSSION
Coronary endarterectomy is a surgical option in the treatment of diffuse coronary artery disease with severe atherosclerosis to improve postoperative outcomes [2]. It helps to supply the myocardium with side vessels (diagonal branches and septal perforators) in the patients with diffusely diseased LAD [3]. In selected patients, coronary endarterectomy has a significant role for obtaining complete revascularization [2,4]. Perioperative complications might increase due to incomplete perfusion in the multifocal or diffuse disease. In these cases, coronary endarterectomy might improve ventricular perfusion.

and postoperative outcomes [4]. In specific patients with well-developed septal artery, extending endarterectomy through to septal artery will improve perfusion of the ventricular septum. Increased perfusion of the ventricular septum will protect left ventricular global motion and improve postoperative left ventricular systolic function.

REFERENCES


