

A 66 year-old male patient who had undergone coronary artery bypass grafting 12 years ago, was admitted to emergency room of our hospital with angina pectoris. There was not any electrocardiographic change but he had elevated cardiac markers. Medical treatment was started for NSTEMI and we decided to perform an elective coronary angiography on the next day. In coronary angiography, it was observed that there was a stenosis in the proximal portion the left subclavian artery and a retrograde flow in the left internal mammarian artery (LIMA) graft on injection the left coronary arteries (Figure 1 and Video 1). There was not any occlusion of his bypass grafts. For subclavian stenosis, percutaneous transluminal angioplasty was planned first, but attempts to pass the lesion failed. Therefore, surgery became the only treatment option left. A left carotid-subclavian artery bypass was performed with a 7 mm ringed PTFE graft. After the operation, radial and ulnar artery pulses are palpable in contrast to preoperative physical findings. The postoperative hospital stay was three days. He had not any chest pain and any other ischemic complaint.



Figure 1. Asterix shows the total occlusion at the origin of left subclavian artery.

The postoperative hospital stay was three days. He had not any chest pain and any other ischemic complaint. Coronary subclavian steal syndrome is a rare complication that may complicate cardiac surgery follow-up and it is an insidious reason of myocardial ischemia in coronary bypass patients, with LIMA coronary conduit. Subclavian stenosis is the most common etiologic factor that causes this steal phenomenon and atherosclerosis is the leading cause of subclavian stenosis. These patients have a retrograde flow from coronary artery to LIMA because of the stenosis on their left subclavian artery, proximal to LIMA origin. It is a more common diagnosis nowadays compared to the past, so prevention and treatment become more an important issue. Because of the atherosclerotic nature of the coronary artery disease, subclavian stenosis should be in mind in patient undergoing coronary bypass. An indicator for diagnosis of subclavian steal syndrome is the blood pressure difference more than 15-20 mmHg between the two arms. Interventional techniques and open surgery are the treatment options. However, like in our case, interventional techniques are not suitable for all lesions. Carotid-subclavian bypass is the most widely used surgical intervention with the satisfying long-term graft patency rates.