OBJECTIVE: Arteriosclerosis is a systemic disease that can affect various vascular beds. For this reason, coexistence of coronary, peripheral, and cerebral involvement is common. Peripheral arterial disease usually occurs together with coronary disease and patients presenting this condition have a 2-fold to 4-fold higher risk of experiencing myocardial infarction and death. We present an unusual case of a Leriche syndrome in a male smoker and without previous history of cardiovascular disease.

METHODS: A 56-year-old man with acute onset of chest pain came to the emergency department. Diagnosis of myocardial infarction with non-ST elevation. Primary percutaneous coronary intervention was performed through the radial artery due to absent pulsations of femoral arteries. LAD proximal 80%, RCA 99% proximal lesion at coronary angiography. Selective arteriography documented total occlusion of the distal abdominal aorta. Renal artery was not observed, and right iliac artery shows filling of collaterals displayed. Doppler ultrasonography revealed low velocity flow and loss of normal biphasic waveforms in the femoral arterial vasculature bilaterally. Smoking was proven to be the only risk factor for advanced atherosclerosis in this patient. Patient was undergone to coronary by-pass surgery after optimal conditions has been received. Triple by-pass was applied by using the saphenous vein to Cx OM branch, LAD and to right coronary artery. General anesthesia inducted with sevofluran inhalation anesthesia and combination with remifentanil infusion, the pump infusion rate was 3530 lt/min/m² by duration of 1 hour and our cross clamp time was 30 minutes. The patient has been hemodinamicaly stable and taken out to intensive care unit without need of balloon pump and inotropic drug support. The patient was discharged from the hospital without any problem in the follow-up period.

RESULTS:

CONCLUSIONS: Coexistence of peripheral vascular disease and coronary disease is common. When deciding treatment for a patient with Leriche syndrome and coronary disease with an indication for revascularization surgery, it is important to document the origin of collateral circulation to the lower limbs. In coronary by-pass operations, using LIMA graft may lead problems especially in patients with peripheral arterial disease. Cases of acute limb ischemia have been reported with use of LIMA grafts, concluded that LIMA is an important collateral source in patients with Leriche syndrome. Therefore; we suggest use of saphenous vein grafts in patients with Leriche syndrome planned to undergone coronary by-pass surgery instead of LIMA that does not risk post-operative lower extremity circulation, moreover reduce morbidity- mortality.
**Keywords:** Acute Myocardial Infarction, Leriche Syndrome

**Sunum Detayları:** PERIPHERAL ARTERIES: NEW THERAPEUTIC TARGETS IN CARDIOVASCULAR MEDICINE