






Optimal medical treatment of patients with peripheral arterial disease

 Ivica Dunder,
 Katica Cvitkušić
Lukenda,
 Marijana Knežević
Praveček,
 Domagoj Mišković,
Sanja Radanac,
 Krešimir Gabaldo *

General Hospital Josip
Benčević, Slavonski Brod,
Croatia

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***ADDRESS FOR CORRESPONDENCE:** Krešimir Gabaldo, Opća bolnica "Dr. Josip Benčević", Andrije Štampara 42, HR-35000 Slavonski Brod, Croatia. / Phone: +385-35-201-150 / E-mail: kresimir.gabaldo@gmail.com

ORCID: Ivica Dunder, <https://orcid.org/0000-0002-3340-7590> • Katica Cvitkušić Lukenda, <https://orcid.org/0000-0001-6188-0708> • Marijana Knežević Praveček, <https://orcid.org/0000-0002-8727-7357> • Domagoj Mišković, <https://orcid.org/0000-0003-4600-0498> • Krešimir Gabaldo, <https://orcid.org/0000-0002-0116-5929>

Introduction: Optimal medical management of peripheral arterial disease (PAD) involves a combination of lifestyle modifications, pharmacologic therapy, and risk factor control to reduce symptoms, improve functional status, and prevent cardiovascular events¹. Lifestyle modification remains the cornerstone of PAD management and includes smoking cessation, supervised exercise therapy (SET), and dietary changes. Pharmacologic therapy consists of antiplatelet agents (aspirin 75–325 mg/day or clopidogrel 75 mg/day), and in patients at high ischemic risk, low-dose rivaroxaban (2.5 mg twice daily) should be added. Statin therapy is recommended for all patients, with a target LDL level <1.4 mmol/L. Antihypertensive therapy should aim for a blood pressure target <130/80 mmHg. Glycemic control in diabetic patients should be individualized, generally targeting HbA1c <7%. SGLT2 inhibitors or GLP-1 receptor agonists are preferred due to their cardiovascular benefits. For symptom relief of claudication, cilostazol (a phosphodiesterase III inhibitor) or pentoxifylline may be used, although their efficacy is limited and cilostazol is contraindicated in heart failure. Revascularization is considered in cases of lifestyle-limiting claudication unresponsive to medical therapy or in patients with critical limb ischemia, where endovascular therapy (angioplasty/stenting) is the preferred initial approach.²

Case report: We present a case of a 59-year-old male, active smoker, with initial LDL >4.1 mmol/L, referred to our institution for intermittent claudication of the right leg after 100 meters. The initial ankle-brachial index (ABI) on the right was 0.65, and MSCT angiography showed a long occlusion (>150 mm) of the superficial femoral artery (SFA). A multidisciplinary team initially opted for surgical treatment with femoral-popliteal bypass. He was discharged on postoperative day 7 but readmitted 14 days later due to acute graft failure, requiring repeat surgery with Fogarty thrombectomy. Despite dual therapy (aspirin + warfarin), control Doppler imaging showed bypass occlusion. Endovascular recanalization was attempted via antegrade-retrograde access but was unsuccessful. The patient was prescribed SET and optimized medical therapy with aspirin + rivaroxaban (2.5 mg twice a day), high-dose statin (atorvastatin/ezetimibe), and perindopril/amlodipine. He also successfully quit smoking. At 3-month follow-up, he reported improved walking distance (up to 3 km) and ABI improvement to 0.86.

Conclusion: Optimal medical therapy, combined with lifestyle modification—especially SET—is essential in PAD management. Revascularization should be reserved for cases where medical therapy fails or in critical limb ischemia.

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LITERATURE

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