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**LOWER LIMB THROMBOSIS DUE TO POPLITEAL ARTERY ENTRAPMENT
SYNDROME IN A 24 YEAR OLD MALE ATHLETE**

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PAES (Popliteal Artery Entrapment Syndrome) is caused mainly by congenital, sometimes bilateral, anatomical abnormalities around the popliteal artery within the popliteal fossa. Combined with active lifestyle may lead to severe symptoms. Abnormalities create disturbances in blood flow and generate symptoms of limb ischemia below the pressure point, often during plantar flexion. Entrapment of popliteal artery is usually manifested by intermittent claudication, skin sensory disturbance in shin and majorly affects young athletes. Too late diagnosis may cause limb amputation or death. Our patient was operated on 3 times. We believe this case is noteworthy due to difficult course and rarity of the disease.

A 24-year-old cyclist was admitted to the Department of Vascular Surgery and Transplantation with acute ischemia of the right lower limb. His symptoms included five days of pain in the lower limb, sensory disturbance in the shin, and intermittent claudication over a distance of 100 meters. He reported heavy training prior to the onset of symptoms. The pulse below the right groin was absent on physical examination. Doppler ultrasonography and angiography of lower limbs showed a thromboembolic lesion in the right superficial femoral artery and the popliteal artery, approx. 11 cm long and extensive collateral circulation. Superficial femoral artery and popliteal artery thrombectomy was performed, followed by a short-term improvement in blood supply. A redo surgery was needed the next day due to thrombosis recurrence. Thrombectomy and angioplasty of the popliteal artery using a drug-eluting balloon were performed successfully. Magnetic Resonance imaging showed medial displacement of the popliteal artery adjacent to gastrocnemius muscle tendon band, with medial gastrocnemius head displaced laterally. The patient was qualified for a planned surgery during which the popliteal artery was reconstructed using a saphenous vein patch. The artery pressed against tibia was released from cross tendons of calf muscles. We achieved proper blood supply of the limb, pulse present on the dorsal artery of foot. Anticoagulant treatment was administered during the two hospitalizations. The postoperative course was without complications. Follow-up 6 months after surgery, no deviation, no recurrence of PAES.

Early diagnosis plays the key role in PAES treatment. Please note that symptoms of limb ischaemia manifest both during and after physical exercise. Then, tests such as functional Doppler ultrasound, functional arteriography and ankle-brachial index enable diagnosis before changes in endothelium and thrombus formation occur. Young age and symptoms associated with intense exercise were relevant. Thrombosis in such a young age itself suggests a cause other than sclerosis or atrial fibrillation.