## P2

**Use of collateral arteries of a shin for endovascular revascularization of the foot arteries in patients with diabetic foot syndrome (clinical observation)**

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**Purpose:** To demonstrate the possibility of using communicant arteries of a shin for endovascular revascularization in patients with diabetic foot syndrome.
**Material and methods:** diabetic patient 57 years old suffered from diabetes 1 type 20 years, amputation of digits of right foot was performed 1 months before endovascular procedure because of the gangrene. Concomitant diseases: ischemic heart disease, arterial hypertension. In admission to hospital the patient complainted on a pain in right shin and foot, presence of nonhealing festering wound in the distal part of the foot. Digital subtraction angiography was performed: extensive occlusions of tibial arteries from the ostium to the level of ankle-joint. Peroneal artery with multiple critical stenoses was visualized to the level of ankle-joint; plantar arterial arc was not observed. Postocclusive fragments of tibial arteries were contrasted through the poorly developed collateral arteries from the peroneal artery. We observed multiple arterial wall calcinosis. The coronary technique was used to perform endovascular procedure. Coronary guidewire was introduced into the distal parts of peroneal artery and through the communicant branch of peroneal artery (CBP) into the distal parts of the posterior tibial artery (PT) and then to the lateral plantar artery (LPA). After the step-by-step balloon angioplasty aforesaid arteries the plantar arterial arc have been visualized with retrograde filling of arteria dorsalis pedis. The nitinol stent «Xpert» was implanted in the communicant artery (CBP) because of blood-limiting dissections of artery. On control angiograms position and opening of the stent was satisfactory, there was a magistral bloodflow in the peroneal artery, collateral artery and distal parts of posterior tibial and plantar arteries, plantar arterial arc was visualized. ABI in the arteria dorsalis pedis and posterior tibial artery before endovascular procedure and in 5 days after the procedure were 0,8; 1,53 and 1,06; 1,39 respectively. In 2 weeks after endovascular procedure the surgical reconstruction of the foot was performed with healing of the wound by primary intention.
**Conclusion:** This clinical demonstration shows that communicant arteries of a shin can be used as the way for revascularization of the arteries of the foot in case of extent occlusions of tibial arteries in patients with diabetic foot syndrome.