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Objective: to evaluate short-term results in the patients undergoing iliac artery stenting for TASC II type B, C, and D iliac lesions.

Materials and methods: 87 iliac endovascular procedures (93 limbs) were performed in 87 patients from January 2017 to the present. The average age of the patients was 63.86 ± 7.51 years. Men – 64 (73.6%), women – 23 (26.4%). Risk factors was identified: smoking – in 87.4%, arterial hypertension – in 96.6%, hyperlipidemia – in 60.9% of cases; 20.7% of patients had type 2 diabetes, 5.3% with the neuro-ischemic diabetic foot.

Clinical characteristic	Value
Age, years	$63,86 \pm 7,51$
Sex, M/W	64/23
Lesions (TASC II), %	
- B	8,1
- C	14,9
- D	77
ABI, mean	$0,61 \pm 0,05$
Risk factors, %	
- smoking	87,4
- arterial hypertension	96,7
- hyperlipidemia	60,9
- diabetes	20,7
- neuro-ischemic diabetic foot	5,3

Table 1.: Clinical characteristics of patients.

Results: In 49.4% of cases recanalization was performed via ipsilateral femoral artery (CFA), in 40.3% - via contralateral CFA, in 10.3% - via brachial artery. In 3.5% of patients with bilateral lesions one of common iliac artery (CIA) recanalization failed due to the chronic "flush" occlusion. In 16.1% of cases the "kissing stent technique" was performed. Residual external iliac artery (EIA) stenosis was 20% in 1 patient. Residual CIA stenosis was 70% in 1 patient, balloon angioplasty was used with the optimal effect.

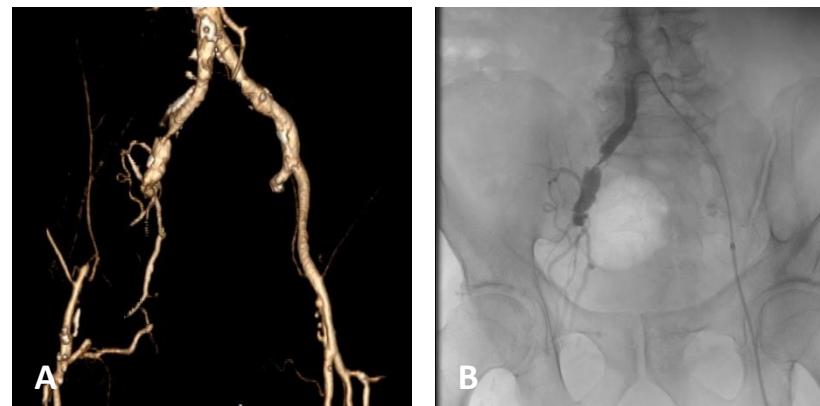


Figure 1. (A) 3D CT-angiography before surgery. (B) Intraoperative angiography.

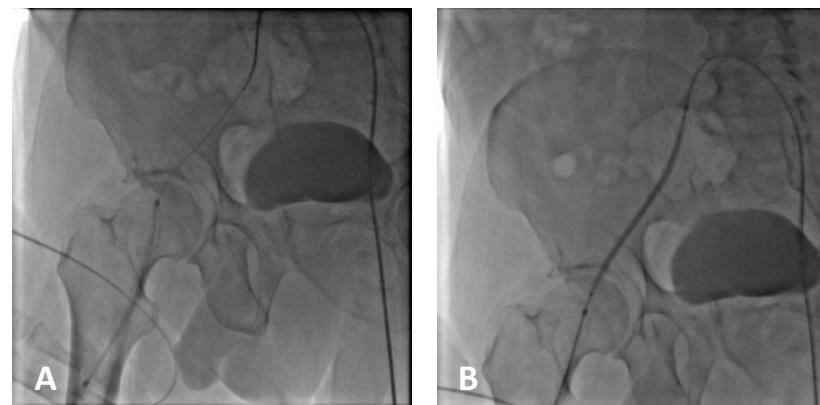


Figure 2. (A) Recanalization. Wire and sheath "meeting" without snare kit, (B) Balloon angioplasty.



Figure 3. (A) Intraoperative angiography after stenting. (B) 3D CT-angiography after surgery.

Recanalization	%
Ipsilateral side	49,4
Contralateral side	40,3
Via brachial artery	10,3
Failed due to chronic "flush" occl.	3,5

Conclusion: it is possible to discuss endovascular surgical treatment of patients with aorto-iliac occlusive disease (type C and D in TASC II) with good short-term results. The technical success was 96.5%, the frequency of residual stenosis was 1.14%.

References:

1. Pepe RJ, Patel P, Huntress LA, Nassiri N: Endovascular Reconstruction for Chronic Infrarenal Aortoiliac Occlusive Disease. *Annals of Vascular Surgery* 2017;45.
2. Taha AA, Hefnawy ET, Tawfik AR, Ibrahim AA: Endovascular management of Trans-Atlantic Inter-Society Consensus C and D aortoiliac occlusive disease as a feasible, effective, and durable intervention. *Egyptian Journal of Surgery* 2017;36:401-406.
3. Kordecki K, Łukasiewicz A, Nowicki M. et al. Assessment of effectiveness of endovascular treatment of common and external iliac artery stenosis/occlusion using self-expanding Jaguar SM stents. *Polish Journal of Radiology*. 2012;77(4):22-29.