

Populacijska analiza u bolesnika s perifernom vaskularnom bolešću u jednogodišnjem periodu – prikaz ranih i kasnih rezultata s obzirom na različite metode liječenja

Population study of periphery artery disease patients in one year period – early and late results according to different procedures

Zoran Miovski*,
Majda Vrkić Kirhmajer,
Ljiljana Banfić,
Dražen Perkov,
Savko Dobrača,
Ranko Smiljanic

Medicinski fakultet Sveučilišta u Zagrebu, Klinički bolnički centar Zagreb, Zagreb, Hrvatska

University of Zagreb School of Medicine, University Hospital Centre Zagreb, Zagreb, Croatia

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***ADDRESS FOR CORRESPONDENCE:** Klinički bolnički centar Zagreb, Kišpatićeva 12, HR-10000 Zagreb, Croatia.
Phone: +385-98-1710329 / Email: miovski.zoran@gmail.com

UVOD: Cilj retrospektivne analize je prikaz kliničkih osobina populacije s perifernom arterijskom bolešću (PAB) u jednogodišnjem razdoblju – tijekom 2011. godine te kliničko praćenje pokazatelja provedenog rezultata liječenja u razdoblju nakon tri godine.

PACIJENTI I METODE: Prikazani su rezultati različitih načina liječenja i to inicijalno kod prvog dolaska u bolnicu, potom u ranom postintervencijskom periodu (<6 mjeseci nakon hospitalizacije) te u razdoblju praćenja do 1. 1. 2014. godine. Svi bolesnici bili su liječeni prema smjernicama Europskog kardiološkog društva iz 2011. godine.

REZULTATI: Tijekom 2011. godine u angioloskoj poliklinici pregledano je ukupno 1218 bolesnika s radnom dijagnozom PAB-a. Hospitalizirano je 193 bolesnika s PAB. Tijekom hospitalizacije učinjeno je 98 endovaskularnih intervencija na donjim ekstremitetima te 36 dijagnostičkih angiografija. Prosječna dob bolesnika je bila $66,99 \pm 9,9$ godina, od toga 80 muškaraca ($65,26 \pm 9$ godina) i 48 žena ($69,87 \pm 10$ godina).

ZAKLJUČCI: 1) Endovaskularne intervencije na ileofemoralnom segmetu i na površinskoj femoralnoj arteriji imaju najbolje rezultate liječenja i imaju najviši porast ABI (ankle-brachial index) u neposrednom postintervencijskom (>6 mjeseci) i kasnom kontrolnom razdoblju. 2) Najmanji pad ABI-a u kontrolnom razdoblju zabilježen je nakon intervencija na površinskoj femoralnoj arteriji, dok je najveći pad zabilježen nakon intervencija u bolesniku s difuznom arterijskom bolesti donjih ekstremiteta. 3) Bolesnici kojima je učinjena kirurška revaskularizacija imaju bolje vrijednosti ABI nakon zahvata u usporedbi s bolesnicima kod kojih je učinjena edovaskularna intervencija, iako razlika nije statistički značajna. Kirurški bolesnici su inicijalno imali težu oblik periferne arterijske bolesti. 4) Endovaskularna intervencija s postavljanjem stenta je superiornija metoda liječenja u usporedbi s balonskom dilatacijom u ranom perintervencijskom razdoblju, dok se pokazatelji kasnih rezultata (ABI i pletizmografija) statistički ne razlikuju u skupinama.

INTRODUCTION: Aim of this retrospective study was to show clinical features of peripheral artery disease (PAD) patients in one year period and clinical follow up in 3-year period.

PATIENTS AND METHODS: Patients were evaluated in the year 2011, after admission to hospital, in early (<6 months) and late follow up period (until 1st of January 2014). All patients were treated according to the European Society of Cardiology Guidelines for peripheral artery disease from 2011.

RESULTS: During 2011, 1218 PAD patients were evaluated in angiology outpatient clinic. We hospitalized 193 PAD patients. During hospitalization we performed 98 endovascular interventions, and 36 diagnostic angiographies. Average patients age was 67 ± 10 years, 80 men (65 ± 9 years) and 48 females (70 ± 10 years).

CONCLUSIONS: 1) Ileofemoral and superficial femoral artery endovascular interventions have best treatment results and have the highest ABI (ankle-brachial index) rise in early and late evaluation period. 2) The lowest ABI decline in follow up period was observed after endovascular interventions on superficial femoral artery, while highest decline was observed after endovascular intervention on patients with diffuse low extremity PAD. 3) PAD patients who were submitted for surgical revascularization had better follow up results than patients who were treated with endovascular intervention, although the difference was not significant. It is important to emphasize that surgical patients had more severe form of PAD. 4) Endovascular intervention with stent implantation is a superior form of intervention in opposite to balloon angioplasty, according to early follow up results, while in late period there was no statistical difference.

LITERATURE

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TABLE 1. Average values of bilateral ABI (ankle-brachial index).

Lesion*	ABI at arrival**	ABI post intervention***	ABI in follow-up****	ABI difference 2011-2014
1	0.56	0.85 (+51%)	0.80 (+43%)	-8%
2	0.58	0.80 (+38%)	0.79 (+36%)	-2%
3	0.58	0.74 (+27%)	0.70 (+20%)	-7%
4	0.73	0.90 (+23%)	0.85 (+16%)	-7%
5	0.43	0.66 (+53%)	0.61 (+41%)	-12%

* Hemodynamically / angiographically significant stenosis or occlusion according to segments: 1- iliofemoral, 2- AFS, 3- femoropopliteal, 4- infrapopliteal, 5- diffuse artery disease, / ** ABI at arrival to hospital, / *** ABI < 6 months after intervention, / ****ABI in follow-up until January 1, 2014

TABLE 2. Patients with peripheral artery disease that rejected surgical revascularisation.

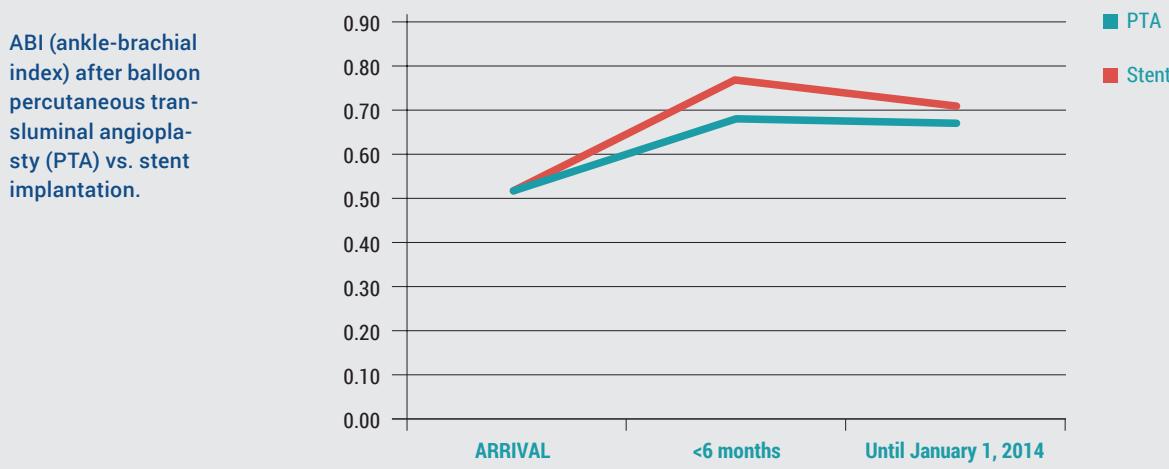
	ABI at arrival	ABI until January 1, 2014	ABI difference
Right	0.52	0.47	-9.6%
Left	0.59	0.53	-10%
Average	0.55	0.5	-9.1%

TABLE 3. Patients with peripheral artery disease submitted to surgical revascularisation.

	ABI at arrival	ABI until January 1, 2014	ABI difference
Right	0.50	0.69	+38%
Left	0.51	0.67	+31%
Average	0.50	0.68	+34%

TABLE 4. ABI (ankle-brachial index) after balloon percutaneous transluminal angioplasty (PTA) vs. stent implantation.

		ABI at arrival	ABI post intervention	ABI until January 1st 2014	ABI difference
Right	PTA	0.56	0.74 (+32%)	0.73 (+30%)	-2%
	Stent	0.54	0.75 (+39%)	0.71 (+31%)	-8%
Left	PTA	0.48	0.62 (+29%)	0.62 (+29%)	0%
	Stent	0.51	0.79 (+54%)	0.71 (+39%)	-15%
Average	PTA	0.52	0.68 (+30%)	0.67 (+28%)	-2%
	Stent	0.52	0.77 (+48%)	0.71 (+36%)	-12%

FIGURE 1.**TABLE 5.** Walking distance (WD) after different interventions.

	WD arrival (m)	WD final (m)	WD difference (m)	Difference (%)
Percutaneous transluminal angioplasty	172	619	+447	260%
Stent	92	573	+481	522%