Long-term Outcome of Patients with APLA undergoing Percutaneous Coronary Intervention

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Background: Antiphospholipid antibody (APLA) syndrome is characterized by vascular (arterial and venous) thrombotic complications. Patients with APLA have increased risk for athero-thrombotic complications, such as myocardial infarction (MI). However, there is limited data about the outcome of patients with APLA who undergo percutaneous coronary intervention (PCI). Accordingly, we aimed to assess the long-term outcome of these patients.

Methods: The Rabin Medical Center PCI registry was systemically reviewed for patients with diagnosis of APLA who underwent PCI between the years 2002-2008. Twenty patients were identified. In order to enable comparison to a high-risk group, we employed the Rabin Medical Center primary PCI registry, which includes all patients with ST-segment elevation MI who underwent primary PCI - 613 patients were included during the time period of 2002-2008. One- and 3-year clinical outcomes were evaluated.

Results: The indication for PCI in the APLA group was MI in 50% of the patients and angina – mainly unstable in the rest (compared with 100% MI in the primary PCI group). Patients with APLA were more often women and had a higher rate of hypertension (Table). All patients with APLA were treated with warfarin in addition to anti-platelet medications. Both at 1 and 3 years patients with APLA had higher rates of target vessel revascularization (TVR), which translated to higher rates of major adverse cardiac events (MACE). There were no differences in MI or mortality between the groups (Table).

Conclusions: Compared with a high-risk group of patients with STEMI who underwent primary PCI, patients with APLA who underwent PCI had worse long-term clinical outcomes, driven by higher rates of revascularization. Surprisingly, MI rates did not differ between the groups. Further study is warranted in higher number of patients, but these results suggest that patients with APLA undergoing PCI are at exceedingly high risk of adverse cardiac outcome.

	APLA (n=20)	Primary PCI (n=613)	P Value
Age (years)	57.6±7	61.3±8	0.2
Males	55%	77%	0.02
Hypertension	80%	52.7%	0.03
Hyperlipidemia	90%	86%	0.5
Smoking	35%	46%	0.2
Diabetes	30%	33.3%	0.6
DES	20%	17%	0.6
1 Year Outcome			
TVR	35%	12.4%	0.003
MI	10%	6.7%	0.5
Death	10%	5.1%	0.5
MACE	45%	22.5%	0.02
3 Years Outcome			
TVR	55%	15.8%	<0.0001
MI	15%	8.5%	0.3
Death	10%	9.6%	0.8
MACE	65%	29.4%	0.0005