

Influence of Acetylcholine Provocation Test on 12 months Clinical Outcomes in Patients Treated with Drug Eluting Stents in Asian Population

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Background Whether DES associated coronary artery spasm (CAS) would predispose additional risk to long-term major clinical outcome is not investigated yet. **Methods:** 1010 pts underwent follow up coronary angiography (CAG) either due to recurrent chest pain or routine follow up during 12 months. Among them, 160 pts with suspicious of CAS underwent the acetylcholine (Ach) provocation test by injecting incremental doses of 20, 50, 100 μ g into the left coronary artery. We compared 12 months clinical outcomes of the pts with DES associated CAS (DES Spasm Group; n=112) with those of pts without CAS (No DES Spasm Group; n=48). **Results:** The incidence of DES spasm was 6.01% (112 pts/1862 PCI pts) in real-world setting. At 12 months, clinical outcome were similar between the two groups (Table). **Conclusions :** Overall incidence of DES spasm was 6% by Ach test. Pts with DES spasm had no negative impact on major clinical outcomes compared with those of no DES spasm pts at least up to one year, suggesting relatively favorable prognosis with additional antianginal medical therapy.

Table. Clinical Outcomes at 12 months according to the Ach provocation test results

Variables, N (%)	DES Spasm Group (n = 112 pts)	No DES Spasm Group (n=48 pts)	P-Value
Total death	1 (0.9)	0 (0.0)	1.00
Cardiac death	1 (0.9)	0 (0.0)	1.00
MI	1 (0.9)	0 (0.0)	1.00
TVR	4 (3.6)	2 (4.2)	0.51
Total MACE	5 (4.5)	2 (4.2)	1.00
Stenting of de novo lesion	5 (4.5)	4 (8.4)	0.42
Repeat CAG with Ach test	7 (6.3)	5 (10.4)	0.51