**DIMINISHED VALUE OF ADENOSINE REVEALING TRANSIENT PULMONARY VEIN CONDUCTION WHEN PRECEEDED BY RADIOFREQUENCY ABLATION GUIDED BY HIGH OUTPUT PACING INDUCED EXIT CONDUCTION**

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Adenosine can be associated with acute recovery of conduction to the pulmonary veins immediately after isolation. The range of adenosine induced pulmonary vein (PV) conduction recovery reported in the literature varies between 35% and 56%. The purpose of this study was to assess the rate of adenosine induced pulmonary vein conduction recovery when preceded by further radiofrequency ablation guided by high output pacing after entrance block.

Methods: A total of 59 patients with symptomatic drug refractory atrial fibrillation underwent circumferential antral PV electrical isolation (PVI) using CARTO electroanatomical 3-dimensional mapping system, irrigated-tip radiofrequency ablation catheter and a circular mapping catheter (LASSO). Pacing at 10 mA/2ms and repeat ablation until loss of capture along the ablation line and evidence for exit block was achieved. This was followed by intravenous adenosine (12-18 mg). Adenosine effect was confirmed by the presence of temporary atrioventricular block.

Results: The mean age of the patients was 57±10.3yrs. Entrance block with PVI was achieved in all 118 pulmonary veins. Pacing capture with local conduction was observed in 32 pulmonary veins (32/118,27%, 95%C.I. 19%, 35%). Loss of pacing capture and exit block was achieved after further ablation in all 32 pulmonary veins. Transient recovery of conduction to the pulmonary veins after adenosine infusion was observed in 7 pulmonary veins (7/118, 5.9%, 95% C.I. 1.6%, 10.2%).

Conclusion: Low yield was demonstrated for adenosine induced PV conduction recovery when preceded with loss of local capture with high output pacing along the ablation line with PV exit block.