Approach to catheter ablation for persistent atrial fibrillation with restoration of sinus rhythm by bepridil.

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**Introduction** : Pulmonary vein isolation (PVI) is an established strategy for atrial fibrillation (AF) ablation. However, it is unknown whether the effect of additional left atrial (LA) ablation affects recurrence of AF.

**Methods** : The study included 30 patients with persistent AF (58±10 years) treated with bepridil. Before performing PVI, bepridil therapy was attempted. Before ablation, AF had converted to sinus rhythm (SR) in all patients. It was divided into two groups. Group-1 with ablation of extensive PVI and cavotricuspid isthmus (CTI) ablation (n=16) Group-2 with ablation of extensive PVI, additional LA ablation and CTI ablation (n=14).

**Result** : There was no significant difference in age, gender, BMI, LA size, LVEF and CHADS2-score between both groups. At 87±51 months follow-up period, 75% of patients in Group-1 were free from sustained AF with antiarrhythmic drugs (50%) and 86% of patients in Group-2 with antiarrhythmic drugs (31%) (P=NS). A second ablation procedure was performed in 4 patients in Group-1 and 4 patients in Group-2 (29% vs. 25%; P=NS). A third ablation procedure was performed in 1 patient in Group-1 and no patient in Group-2. Major complications occurred in 1 patient in Group-1 and no patient in Group-2 (7% vs. 0%; P=NS).

**Conclusion** : Among patients with persistent AF with restoration of SR by bepridil, we found no reduction in the rate of recurrent AF when was performed in addition LA ablation.