The Effectiveness of the Ablation Method for Chronic Atrial Fibrillation Extending the Pulmonary Vein Isolation Line into Atrial Septum

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Purpose: Circumferential pulmonary vein ablation (CPVA) has been widely applied to atrial fibrillation (AF), however the effectiveness for chronic AF (CAF) is limited. Methods and Results: In order to improve success rate of CAF, we attempted to extend ablation line from left pulmonary vein to atrial septum passing through coronary sinus (EXAS method). In consecutive 77 CAF cases, latest 53 patients were treated with EXAS method, and initial 24 cases were treated with conventional CPVA method. During the procedure, CAF was terminated in 60% patients of EXAS group, whereas 27% in CPVA group (p=0.02). Freedom from recurrence of AF at 6 months was 8% in EXAS group, and 46% in CPVA group (p<0.0006). Conclusion: Stepwise additional ablation into atrial septum is effective method of CAF.

Keywords: atrial fibrillation, ablation, atrial septum