encountered more frequently in the cardiac catheterisation laboratory. Survival depends on prompt recognition and rescue pericardiocentesis.

Objective The aim of this report was to validate fluoroscopic heart silhouette characteristics associated with cardiac tamponade as a diagnostic method, and evaluate the safety and effectiveness of fluoroscopy-guided pericardiocentesis during catheter ablation.

Methods All cases of acute cardiac tamponade that occurred in the cardiac catheterisation laboratory during radiofrequency catheter ablation from March 2004 to November of 2009 were reviewed retrospectively.

Results Of 1852 catheter ablation procedures performed during a 5-year period, 10 (0.53%) were complicated by cardiac tamponade. Fluoroscopic examination confirmed the diagnosis in all 10 patients and demonstrated effusions before hypotension. In 4 patients. All patients were stabilised by fluoroscopy-guided pericardiocentesis with placement of an indwelling catheter and autologous transfusion. The time interval between recognition of cardiac tamponade and completion of pericardiocentesis was 6.0±1.8 min (range 3–9 min). The mean aspirated blood volume was 457 ml (range 110–1400 ml), and the mean autotransfused blood volume was 425 ml (range 100–1384 ml). Surgical repair of the cardiac perforation was needed in one patient. No procedure-related death occurred. The ablation procedures were resumed and succeeded in 5 patients after pericardiocentesis.

Conclusion A reduction in the excursion of cardiac silhouette on fluoroscopy is an early diagnostic sign of cardiac tamponade during radiofrequency ablation. Fluoroscopy-guided pericardiocentesis is a safe and effective management strategy for cardiac tamponade developed in the cardiac catheterisation laboratory.

Objective To investigate clinical symptoms, episodes of arrhythmias and its therapy in patients with Brugada syndrome treated with implantable cardioverter-defibrillator (ICD).

Methods Five patients with concealed Brugada syndrome (all male, mean age 41.6±10.14 years) were treated with single-chamber ICD and followed up every three months. The time of onset, type of arrhythmia, treatments and its results of the episodes were investigated according to the data logs of the ICD.

Results The diagnosis of Brugada syndrome was made according to sodium channel blocker provocation test in four patients (2 by ajmaline, 2 by propafenone), and screen of new praceordial leads system in another case. Episodes of syncpe in all patients and ventricular fibillation in four cases were documented before ICD therapy. During electrophysiological study, ventricular fibillation could be induced in three patients. During a follow-up of 22±13 months, 75 episodes of ventricular fibillation were documented. Among them 61 were terminated by 86 shocks successfully, 14 stopped spontaneously. One patient still experienced 4 episodes of syncpe because of his increased defibrillation threshold. One patient had 26 times inappropriate shocks due to atrial fibrillation, which disappeared after we adjusted the protocol of the ICD. Another one had two episodes of syncpe though no event was recorded in his ICD. Because the tilt test reached positive result, the diagnosis of vasovagal syncpe was made.

Conclusion ICD implantation is a necessary and effective therapy for high risk patients with Brugada syndrome, and should be followed up regularly and programmed appropriately because of increased defibrillation threshold or inappropriate shocks.

Objective To study postconditioning effects during the first minutes of reperfusion in STEMI patients undergoing emergency percutaneous transluminal coronary angioplasty (PTCA) and stenting within 12 h from onset of symptoms to open the infarct-related coronary artery, were randomly divided in two groups: the control group (n=34) which were treated by implantation stent after PTCA, and the experimental group (n=30) which were treated by ischaemic postconditioning within first minutes of reflow by 5 episodes of 30-seconds inflation and 30-seconds deflation of the angioplasty balloon. All patients were first onset of STEMI, and did not have the inverse perfusion from collateral circulation. Two groups were observed and compared with reperfusion arrhythmias within 5 min after beginning put into practice reperfusion.

Results In the control group and experimental group the incidence of frequent premature ventricular contraction (PVC) was dividedly 52.9% and 26.7% (p<0.05), paroxysmal ventricular tachycardia was dividedly 58.8% and 23.3% (p<0.05), nonparoxysmal ventricular tachycardia was dividedly 41.2% and 16.7% (p<0.05), ventricular fibrillation was dividedly 5.9% and 0%, sinus bradycardia was dividedly 26.5% and 6.7% (p<0.05), sinus arrest was dividedly 20.6% and 5.3% (p<0.05), and atrioventricular block was dividedly 14.7% and 0% (p<0.05). In postconditioning group there was significant reduction in the incidence of reperfusion arrhythmias.

Conclusions postconditioning in emergency PCI for STEMI can significantly reduce the incidence of myocardial reperfusion arrhythmias.

Objective To determine whether HATCH score can predict recurrence of atrial fibrillation after catheter ablation.

Methods The data of 608 consecutive AF patients who underwent AF ablation in the catheterisation laboratory over the past 5 years were used. The detailed characteristics of the patients are shown in Table 1. The HATCH score was calculated and compared with the recurrence of atrial fibrillation.

Results The HATCH score correlated significantly with recurrence of atrial fibrillation after ablation. The odds ratio of recurrence of atrial fibrillation for each unit increase of HATCH score was 1.24 (95% CI: 1.00–1.52, p=0.05). The discrimination of the HATCH score was evaluated using the area under the receiver operating characteristic curve, which was 0.69 (95% CI: 0.63–0.75, p<0.05). The optimal cutoff point for the HATCH score was 7, above which the patients had a significantly higher recurrence of atrial fibrillation (p<0.05). The sensitivity and specificity of the HATCH score were 51.5% and 72.2%, respectively.

Conclusions The HATCH score can predict recurrence of atrial fibrillation after catheter ablation. The cutoff point of HATCH score was 7, above which the patients had a significantly higher recurrence of atrial fibrillation.