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 1582 catheter ablation procedures performed during a 5-year period, 10 (0.55%) 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.

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**e0569 FOLLOWUP OF FIVE PATIENTS WITH BRUGADA SYNDROME TREATED WITH ICD**

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**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 precardiac leads system in another case. Episodes of syncope in all patients and ventricular fibrillation in four cases were documented before ICD therapy. During electrophysiological study, ventricular fibrillation could be induced in three patients. During a follow-up of 22±13 months, 75 episodes of ventricular fibrillation were documented. Among them 61 were terminated by 86 shocks successfully, 14 stopped spontaneously. One patient still experienced 4 episodes of syncope 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 syncope though no event was recorded in his ICD. Because the tilt test reached positive result, the diagnosis of vasovagal syncope 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.

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**e0560 CAN HATCH SCORE PREDICT RECURRENT OF ATRIAL FIBRILLATION AFTER CATHETER ABLATION?**

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**Background**  
HATCH score (1*hypertension+1*[age>75]+2*[stroke or transient ischaemic attack]+1*[chronic obstructive pulmonary disease]+2*[heart failure]) is an established predictor of progression from paroxysmal to persistent atrial fibrillation (AF). Whether atrial remodelling indexed by HATCH score could be a predictor of recurrence after catheter ablation of AF needs to be explored.

**Methods**  
The data of 606 consecutive AF patients who underwent an index circumferential pulmonary veins ablation were retrospectively analysed. Of these patients, 513 (51.5%) patients had HATCH=0, 225 (37.0%) patients had HATCH=1, 75 (12.2%) patients had HATCH=2. The patients with HATCH=2 had significantly the largest left atrium size, the largest left ventricular end systolic diameter, and the lowest ejection fraction among the three HATCH categories. There were significant differences of the proportion of diabetes mellitus, statins medication, and angiotensin-converting enzyme inhibitors/angiotensin receptor blockers medications among the