

CONCLUSIONS Arrhythmia recurrence rates in the patients referred abroad for ablative therapy during the period between 2010-2015 are relatively high. The Maltese cohort had comparatively more advanced disease with RF ablation being generally considered only as a final attempt in the management strategy. This supports the implementation of a local catheter ablation programme for complex arrhythmias.

073_16783-H4
Utility and Safety of A New Internal Cardioversion System during Catheter Ablation of Atrial Fibrillation

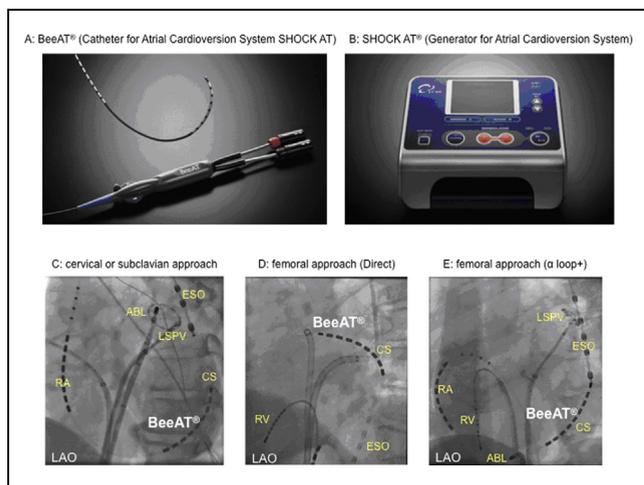


M. Kaneko, S. Maeda, Y. Enomoto, S. Shiohira, Y. Shirai, A. Yagishita, T. Sasaki, Y. Takahashi, M. Kawabata, M. Goya, K. Hirao
 Heart Rhythm Center, Tokyo Medical and Dental University, Tokyo, Japan

INTRODUCTION It is reported internal cardioversion (IC) via subclavian (upper) approach is effective for termination of atrial fibrillation (AF) during catheter ablation (CA) for AF. We sought to evaluate the utility and safety of a new IC system by adopting the femoral approach.

METHODS This study included 159 consecutive patients (75 and 84 via upper and femoral approach respectively) during CA for AF. We used the BeeAT[®] catheter and dedicated defibrillator (A,B). Cardioversion is performed between distal and middle sets of electrodes.

RESULTS AF was terminated successfully in 98.7% via upper approach (C). In contrast, sinus rhythm was restored in 71.0% with direct coronary sinus cannulation via femoral approach (D). However, success rates improved to 93.3% when IC catheter formed an α -loop in the RA (E). Of note, there were no complications in the femoral approach, whereas pneumothorax occurred in upper approach.



CONCLUSIONS Femoral approach was comparable regarding AF termination to upper approach when IC catheter adopted an α -loop in the RA.

073_16764-Q1
Successful Cryoballoon Ablation in a Case With Paroxysmal Atrial Fibrillation Who Had Unusual Geometry



T. Tokano, Y. Nakazato, T. Shiozawa, Y. Kimura, F. Odagiri, H. Tabuchi, H. Hayashi, G. Sekita, M. Sumiyoshi, H. Daida
 Cardiology, Juntendo University Urayasu Hospital, Urayasu, Japan

INTRODUCTION Cryoballoon ablation (CBA) is sometimes difficult due to geometry of the left atrium (LA) and pulmonary veins (PV).

CASE The present case is a 43 year-old female with paroxysmal atrial fibrillation. LA diameter was 38mm in an echocardiography, however, the LA geometry was very unusual as shown in the figure. CBA was performed in this case, however, we did not feel any difficulty in the placement of a Flex Cath Advance[™] and the manipulation of an Achieve[™] guide wire and a cryoballoon, Arctic Front Advance[™] in the LA and PV. PV isolation was completed with 3 times applications in the each left PV and 1 time application in the each right PV with total procedure time of 120 minutes. PV isolation using CBA was successfully completed in the present case although the geometry of LA was very unusual like lacking the LA posterior wall.



CONCLUSION CBA can be applied safely in cases with a usual geometry of LA if the size of PV is adequate.

073_16809-H5
LA Roof-Dependent Atrial Flutter after Cryoballoon Ablation of Pulmonary Vein Isolation in a Patient with Paroxysmal Atrial Fibrillation



J. Morii, M. Ogawa, Y. Idemoto, T. Komaki, Y. Nagata, S. Imaizumi, K. Saku, S. Miura
 Department of Cardiology, Fukuoka University Hospital, Fukuoka, Japan

INTRODUCTION Cryoballoon ablation is known to be safe and effective to treat drug-refractory atrial fibrillation. Although conventional catheter ablation for LA substrate modification occasionally make macro-reentrant substrate such as gap-related, there are few reports of LA macro-reentrant atrial tachyarrhythmia after pulmonary vein isolation (PVI) using cryoballoon ablation.

METHODS N/A

RESULTS A 67 year old male was referred to our hospital for treatment heart failure due to paroxysmal atrial fibrillation. PVI using cryoballoon technique was successfully performed and cavotricuspid isthmus linear ablation was additionally performed at first session. Several days after first session, atypical atrial flutter (AFL) was documented. At second session, Electrical and three-dimensional mapping during atypical AFL identified macro-reentrant circuit went through from LA anterior wall to posterior wall via LA roof gap between two scar areas (<0.05mV) which are detected in the vicinity of bilateral