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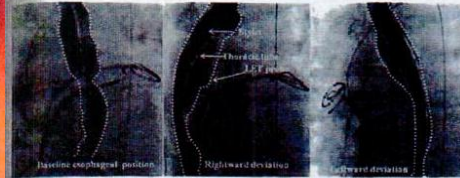
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other an ulceration of moderate severity. In addition, 11 pts (58%) exhibited findings consistent with esophageal instrumentation-related trauma.

Conclusions: Esophageal deviation can be successfully performed and maintained allowing for uninterrupted energy delivery in the posterior wall during AF ablation. This promising approach should be investigated in a prospective, randomized study.



PO5-131

REMOTE MAGNETIC NAVIGATION FOR ATRIAL FIBRILLATION WITH THE OPEN IRRIGATED CATHETER: SINGLE CENTER EXPERIENCE IN A RANDOMIZED STUDY

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Introduction: Catheter ablation of atrial fibrillation (AF) with the remote magnetic navigation system (RMN) and the open irrigated catheter (OIC) has shown satisfactory results. This study sought to compare the results of patients undergoing radiofrequency catheter ablation (RFCA) using RMN system and manual open irrigated catheter (OIC).

Methods: A total of 87 patients with paroxysmal (PAF) or persistent (PER) AF, undergoing RFCA were randomized to RMN ablation (n=43, 62±11 years, 63% male, 40% PAF, 60% PER AF) and manual ablation (n=44, 61±11 years, 59% male, 45% PAF, 55% PER AF). All procedures were performed by the same operator.

Results: Baseline characteristics were not significantly different between the groups. Compared to manual ablation, RMN was associated with longer procedure time (148±47 versus 202±45 minutes, p<0.001) and RF time (66±32 versus 88±37 minutes, p=0.004); whereas the fluoroscopic time for RMN was significantly shorter (33±13 versus 26±15 minutes, p=0.002). At 120±34 days of follow-up, 35(80%) patients in manual group and 36(84%) patients in RMN group (log-rank p=0.588) were arrhythmia free. In 5 cases (11%) the operator had to switch to manual ablation to complete the electrical isolation of the right pulmonary veins. The Kaplan-Meier curve shows the event-free survival by ablation (figure). No complication occurred in both groups.

Conclusions: Catheter ablation of atrial fibrillation with the remote magnetic system and the open irrigated catheter is as safe and effective as the manual ablation, but it is associated with longer radiofrequency and procedural times.

PO5-132

COMPLEMENTARY VALUE OF ADENOSINE AND RADIOFREQUENCY IN THE CRYO-BALLOON ISOLATION OF PULMONARY VEINS FOR PAROXYSMAL ATRIAL FIBRILLATION

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Introduction: Pulmonary veins isolation (PVI) with cryo-balloon (CB) has demonstrated its effectiveness for the treatment of paroxysmal atrial fibrillation (PAF). VP reconstruction is the principal cause of recurrence. Adenosine (AD) has been used to "unmask" residual conduction (RC) in apparently isolated PV with radiofrequency (RF). However, its usefulness has been less studied post CB-PVI.

The aim of this work is to study the usefulness of AD in the demonstration of bidirectional block (BB) post PVI-CB as well as the effectiveness of focal RF application in the elimination of residual Gaps (RG).

Methods: From 37 patients with PAF, 144 PV were treated with the Artic Front Cryocath 28 mm CB. Acute BB was checked after basal PVI and post AD administration (12-18 mg, i.v.). Precise location of RG was performed with a circular duodecapolar 7F with adjustable diameter catheter (St. Jude Reflexion Spiral). All PV were divided in four segments. New CB applications were performed when 2 or more segments recondensed. Reconnection in one single segment was treated with single focal RF application.

Results: Basal acute BB was demonstrated in 141/144 PV (97.9%). Reconnection after AD happened in 12 (8.3%) PV. The highest number of RG after AD were found at the level of right inferior PV (7) (4.86%) mainly at the superior segment level (4) (2.7%). Only the most extensive RC required 2 RF focal applications to be abolished.

Complete BB after RF was documented following AD administration in 143 PV (99%).

One left superior PV showed permanent conduction at the superior segment level through an extrapulmonary muscular connection, finally abolished distal into the vein by focal RF application.

Conclusions: Cryo-Energy CB application doesn't produce a homogeneous circumferential lesion in all PV, which is related to their anatomical shape and size, and correlates with the degree of occlusion, showing the highest rate of RG at the level of inferior right PV due to its more difficult ostium-CB approach. Routine use of AD after acute CB-PVI allows to identify incomplete lesion with dormant tissue, not evident in basal condition. Focal RF applications eliminates such RC.

PO5-133

THE USE OF A SINGLE ABLATION DEVICE (BARD MESH-ABLATION CATHETER) IN THE TREATMENT OF PAROXYSMAL ATRIAL FIBRILLATION. INITIAL EXPERIENCE AND MID TERM FOLLOW UP

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Introduction: Point by point PV antrum isolation using 3 D mapping is still a time consuming method to treat atrial fibrillation. Therefore a single device approach with a combined mapping and ablation tool seems to be promising. We tested the MESH-Ablator (Bard™) in terms of safety, procedure duration, fluoroscopy time long term success compared to a conventional point by point antral isolation.

Methods: Between 2007 and 2009 a total of 110 pt. (69 m, 41,



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