

Abstract 0163 – Table: Table Long-term anticoagulation therapy management

AF	A GROUP (N=74)		B GROUP (N=63)		C GROUP (N=17)	
	YES (N [%])	NO (N [%])	YES (N [%])	NO (N [%])	YES (N [%])	NO (N [%])
TAC						
YES (N [%])	14 (18.9)	11 (14.9)	29 (46)	20 (31.7)	4 (23.5)	0 (0)
NO (N [%])	2 (2.7)	43 (58.1)	3 (4.8)	7 (11.1)	6 (35.3)	5 (29.4)
LTFUP (N [%])		4 (5.4)		4 (6.4)		2 (11.8)

AF: Atrial fibrillation ACT: anticoagulant therapy LTFUP: lost to follow up patient

Aims Assessment of long-term ACT after AFL RFA according to associated atrial fibrillation (AF) and CHA₂DS₂VASc score.

Methods From January 2012 to December 2013, patients who underwent RFA of cavotricuspid isthmus for typical atrial flutter in our centre were retrospectively included.

Results Of 166 patients (137 men, mean age: 66.7±10years), 61 (36.7%) had a history of AF. The mean CHA₂DS₂VASc score was 2.49. The patients were classified according to theoretical indication of LT ACT (patients with a non rhythmic ACT indication excluded – N=12; 7.2%): group A (LT ACT unclear) included patients with CHA₂DS₂VASc score ≥1, successful RF ablation and without AF history (N=74); group B (LT ACT indicated) included patients with CHA₂DS₂VASc score ≥1, AF history and/or failed AFL RFA (N=63); group C (LT ACT not indicated) included patient with CHA₂DS₂VASc score=0 (N=17). During a mean follow up of 489±244 days, 45 (60.8), 10 (15.9%) and 11(64.7) patients stopped ACT respectively in group A, B and C differently according to AF onset (table). There were 8 (4.8%) hemorrhagic and 2 (1.2%) ischemic complications, all in patients with correct ACT management. The prevalence of AF during follow-up was 38%.

Conclusion After successful AFL RF ablation, ACT was frequently stopped in the absence of associated AF. However, AF was frequent even inpatients with no AF history. Ischemic and hemorrhagic complications were rare. ACT should be regularly evaluated during follow-up especially according to CHA₂DS₂VASc score and new onset of AF.

The author hereby declares no conflict of interest

0081**Percutaneous left appendage closure: real life outcomes and mid-term results during initial experience in a dedicated electrophysiology team**

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Purpose Percutaneous left atrial appendage closure (LAAC) is accepted as a valuable solution for patients (pts) with atrial fibrillation (AF) and high thromboembolic risk in case of contra-indication to oral anticoagulation (OAC). Little is known about mid-term results in the real life setting.

Methods We analyzed mid-term results in a dedicated EP team (2 experienced electrophysiologists [AF ablation >200 per yr], 1 echocardiologist, 1 anesthesiologist). All indications were discussed before the procedure in a multidisciplinary approach.

Procedures were done under general anesthesia in a dedicated EP room with in-hospital cardiac surgery facilities. All LAAC procedures were performed with Watchman devices (Boston Scientific).

Results 50 pts were enrolled (male 76%, 77±6 years, paroxysmal AF 44%, permanent 54%). The CHADS₂ VASc average score was 4.6±1.3; ≥4: 76%. HASBLED score was 3.7±1: ≥4: 64%. All indications were definitive contra-indications for OAC due to hemorrhagic events (neurological 75%, gastrointestinal 13%, ENT 3%, other 4%). The CT-scan ruled out any thrombus before the procedure for all pts with a perioperative TEE confirmation. Success rate

of implantation was 100% (time of procedure 50±10 min, scopy time 8±3min). There were no periprocedure complications.

Postoperative therapy was: antiaggregation 31%, double antiaggregation 37%, anticoagulation 18%, none 3%. After 2 months, and TEE control, the initial treatment was switched to: antiaggregation 50%, double antiaggregation 10%, anticoagulation 10%, none 30%. Mid-term complications were: non severe pulmonary embolism N=1, recurrent non severe hemorrhagic stroke N=1, TIA due to carotid stenosis N=1. There were no other adverse events during 7,4±5 months follow-up.

Conclusion In a single center with large experience in EP, LAAC was performed with a very low rate of complications and excellent mid-term results regarding recurrences of thromboembolic and hemorrhagic events.

The author hereby declares no conflict of interest

0338**Computed tomography evaluation of the anatomical variation of the pulmonary veins in atrial fibrillation**

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Introduction The electrophysiological and anatomical properties of the pulmonary veins (PVs) have been focused on since their crucial role in triggering or generating atrial fibrillation (AF) was first revealed. The presence of four distinct pulmonary veins (two left PVs and two right PVs) has been described as the normal variant.

Aim The purpose of our study was to describe the anatomy of the pulmonary veins in a cohort of patients of our country followed for AF.

Methods and results Our study is a prospective study which has included 38 patients followed for AF in the cardiology's department of our Hospital. All patients underwent a CT scan of PVs in order to characterize their anatomy. PVs' size was represented by the largest diameter.

Our patients had a mean age of 50.5±13 years. The majority of our patients had paroxysmal AF (65.8%), 4 had persistent AF (10.5%), 9 had prolonged persistent AF (24%). AF occurred in 63.6% of cases in healthy heart and 36.4% in pathological heart, 13 patients had an anatomical variant which represent 34.2% of the population. We had 3.9 PVs in average with a minimum of 3 and a maximum of 5 PVs. The average diameter of different VP was 23.45±9.31mm for the left PVs and 19.75±7mm for the right PVs. 7 patients (18.4%) had anatomical variants interesting the left PVs with single ostium forming a core collector left in all cases.

Concerning the right pulmonary veins, anatomical variations were found in 15.8% of cases, one patient (2.65%) had a single ostium forming a core right collector and 5 patients (13.15%) had 3 ostia (presence of 1 middle pulmonary veins on the right).

Conclusion Cardiac CT is a non invasive procedure which can provide a detailed evaluation of the anatomy of the pulmonary veins. The presence of anatomical variations is common in patients with AF. This assessment is recommended to ensure success of the ablation procedure.

The author hereby declares no conflict of interest

Abstract 0380 – Table: Comparison of PV features evaluated by CT scan according to age

	Group 1 Age >50 years old N=20 patients	Group 2 Age ≤50 years old N=18 patients	P
The average left atrium volume	140.8±75.78ml	75.72±29.10mL	P =0.01
Mean number of PV	3.85±0.48	4±0.65	NS
Average diameter of left PV	26.82±8.68	25.03±12.29	NS
Average diameter of right PV	20.58±5.35	22.81±6.05	NS
Left single ostium forming a core collector	4 (20%)	3 (16.6%)	NS
Right single ostium forming a core collector	1 (5%)	4 (22%)	NS

0380

Study of anatomical features of pulmonary veins assessed by computed tomography according to age

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Introduction Pulmonary veins (PV) play a crucial role in triggering and generating atrial fibrillation (AF). Isolation of PVs is fundamental in the AF ablation whether paroxysmal or persistent. The presence of four distinct pulmonary veins (two left PVs and two right PVs) has been described as the normal variant.

Aim The purpose of our study was to investigate whether the age of the patients had an influence on the incidence of anatomical abnormalities of PVs.

Methods Our study was a prospective study which has included 38 patients followed for AF in the cardiology's department of our hospital. All patients underwent a CT scan of PVs in order to characterize their anatomy. PVs' size was represented by the largest diameter. We have divided our cohort into two groups: group 1: patients aged more than 50 years and group 2: patients aged less than 50 years.

Results Our patients had a mean age of 50.5±13 years. The majority of our patients had paroxysmal AF (65%), 4 had persistent AF (10%), 9 had prolonged persistent AF (25%).

CT Scan of PV results according to age are summarized in table.

Conclusion In our study, we found no significant relationship between age and anatomical abnormalities of the PVs. Hence, it is important to look for these anatomical anomalies whatever was the age of the patients to increase the success rate and to avoid complications during the AF ablation procedures.

The author hereby declares no conflict of interest

0218

Influence of gender on the distribution of anatomic anomalies of the pulmonary veins (PVs) in a cohort of 38 patients with atrial fibrillation (AF)

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Introduction Obstructive sleep apnea (OSA) is associated with oxidative stress, risk factors including hypertension, and with binary presence of coronary artery disease (CAD). However, whether OSA contributes to the severity of CAD and to future adverse events in patients with CAD remains unknown.

Aim The aim of this study was to investigate the association between severe OSA and multivessel CAD.

Methods We examined the apnea hypopnea index (AHI) using polygraphy (PG) in 60 consecutive patients with ACS who underwent coronary angiography. OSA was defined by AHI≥5 events per hour and was considered severe if the AHI≥30 events per hour. The Friesinger score was calculated for each patient from the coronary angiography to evaluate the severity of CAD.

Results The average age of patients was 59.73 years±10.1 years. The sex ratio was 1, 5.

61, 7% of patients had an AHI≥5 and 21,7% had severe OSA with AHI≥30. The Friesinger score was significantly greater in the group with multivessel CAD (11, 28±4, 17 versus 5, 35±3, 96, p=0,0001). There were no differences between patients having multivessel CAD and those with single-vessel CAD regarding clinical characteristics.

Table summarizes these results.

Abstract 0218 – Table: Comparison of patients with multivessel CAD and with single vessel CAD.

	Multivessel CAD (n=33)	Single vessel CAD (n=27)	P
Age	59,3±9,1	60,26±11,47	0,72
Male	35%	25%	0,51
Bmi	27,75±3,43	28,27±4,61	0,62
Smoking	31,7%	20%	0,31
Hypertension	33,3%	28,3%	0,85
Diabetes	35%	23,3%	0,35
Severe OSA	11,7%	10%	0,83

Conclusion In summary, these data suggest a high occurrence of obstructive sleep apnea in patients with CAD, which should be taken into account when considering risk factors for CAD. However, severe OSA is not more frequent in the group of multivessel CAD. Further studies are needed to evaluate the impact of the presence of severe OSA on short and long term prognosis.

The author hereby declares no conflict of interest

0362

Atrial fibrillation after radiofrequency ablation of atrial flutter: prevalence and risk factors

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Background Radiofrequency ablation (RFA) is the only curative treatment for typical atrial flutter (AFL) and allows stopping antiarrhythmic drugs. However, atrial fibrillation (AF) is frequent during follow-up but predictive factors of AF onset are unknown while it is necessary to diagnose it in order to apply the correct antithrombotic strategy.

Aims To determine prevalence and predictors of AF after AFL RFAAFL.