without AF (OR: 2.48, 95% CI: 1.41–4.49; and OR: 2.22, 95% CI: 1.19–4.15, respectively) and those without antithrombotic therapy (OR: 2.79, 95% CI: 1.53–5.57; and OR: 2.45, 95% CI: 1.30–4.91, respectively) (Figure).

Conclusion: Elevated DD level on admission was a significant determinant of ischemic stroke shortly after admission for AHF, suggesting a predictive role of DD level for short-term ischemic stroke in AHF patients.

Funding Acknowledgements: The NaDEF registry was supported by a Grant from the Japan Cardiovascular Research Foundation, and a Grant-in-Aid for Young Scientists

P6386

Endothelial dysfunction as a potential link between interatrial septal abnormalities and methylene tetrahydrofolate reductase (MTHFR)-inherited thrombophilia. A preliminary study on cryptogenic stroke

L. Sgarra[1], T. Acquaviva[2], E. De Cillis[2], C. Nacci[3], A. Potenza[3], M. Grimaldi[4], M.M. Ciccone[5], A.S. Bortone[5], M. Montagnani[3]. *[1]Polyclinic Hospital of Bari, Bari, Italy; [2]Polyclinic Hospital of Bari, Department of Emergency and organ transplantation - Cardiosurgery Section, Bari, Italy; [3]Polyclinic Hospital of Bari, Department of Medical Sciences and Human Oncology - Pharmacology section, Bari, Italy; [4]Regional General Hospital F. Miulli, Acquaviva Delle Fonti, Italy; [5]Polyclinic Hospital of Bari, Department of Emergency and organ transplantation - Cardiology Section, Bari, Italy*

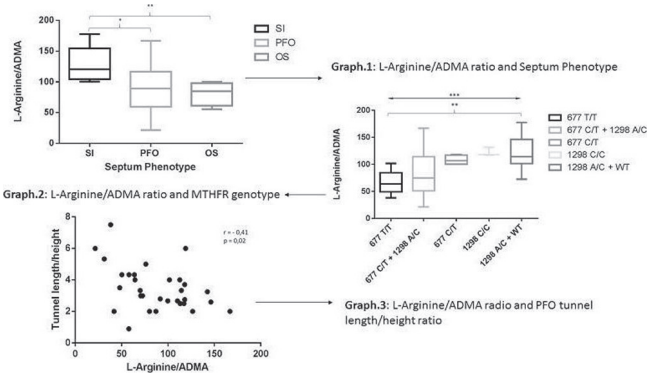
Background: It is commonly accepted that interatrial abnormalities (IA) and thrombophilic states can overlap without interact, leading to cryptogenic stroke (CS) aptitude. In endothelial cells, defects of MTHFR may trigger endothelial dysfunction (ED), that in turn enhances pro-thrombotic conditions and affects the endocardial septum integrity.

Aim: To evaluate whether a correlation exists, in terms of severity, between the genotype of the MTHFR mutation, the phenotype of the interatrial septum and the degree of endothelial dysfunction.

Methods: On Forty-one (41) patients (17/24:M/F, aged 41±1,7 years) hospitalized because a history of stroke, plasma levels of L-arginine and ADMA, and MTHFR genotype were evaluated. Characterization of interatrial septum phenotype was assessed by transesophageal echocardiography.

Results: The L-Arginine/ADMA ratio was significantly higher in SI patients (127,7±13,5) with respect to IS carriers. The L-Arginine/ADMA ratio was significantly lower in the highest severity 677 T/T subgroup (67,3±5,9; $p<0.01$).

A negative linear correlation was found when the individual L-Arginine/ADMA ratio was plotted with the corresponding tunnel length/height ratio ($p<0.02$; r=–0.4; R2=0.16).



Conclusions: In summary, our findings suggest that: 1) folate cycle disruption, subsequent to impaired activity of mutated MTHFR isoforms, triggers endothelial dysfunction indicated by a low L-Arginine/ADMA ratio; 2) L-Arginine/ADMA ratio correlates with interatrial septum phenotype, 3) MTHFR defects, might provide one shoot explanation for IA and CS via ED.

P6387

A comparison of procedural and short-term clinical outcomes of left atrial appendage occlusion between amplatzer cardiac plug and watchman device in the early learning periods

S.H. Lee[1], D.H. Jang[2], H.S. Jung[2], H.D. Kook[2], H.J. Joo[2], J.H. Park[2], S.J. Hong[2], D.S. Lim[2], W.J. Shim[2], C.W. Yu[2]. *[1]Mediplex Sejong Hospital, Cardiology, Incheon, Korea Republic of; [2]Korea University Anam Hospital, Cardiology, Seoul, Korea Republic of*

Background: There have been few data comparing the Amplatzer Cardiac Plug (ACP) and the WATCHMAN device in terms of safety and efficacy of left atrial appendage occlusion (LAAO) during the early learning period, which is known to be associated with higher rates of peri-procedural complications.

Methods: We analyzed the two cohorts of 155 patients (males: 66.5%, mean age: 66.5±9.0 years, CHADS2: 2.55±1.3, CHA2DS2-VASc: 3.79±1.6, HAS-BLED: 2.94±1.2) who underwent LAAO using the ACP (n=90) or the WATCHMAN device (n=65) from October 2011 to February 2015 at 5 centers with little or no experience of LAAO in Korea. The efficacy endpoint was defined as the composite of all cause death, stroke or systemic embolism. The safety endpoint was the composite of device embolization, cardiac tamponade or, major bleeding (requiring tranfusion).

Results: Baseline characteristics were similar between groups, with higher numbers of CHF (p=0.029) in WATCHMAN group. The LAAO procedure was successful in 151/155 cases (97.4%) and there were no significant differences in procedural success rates between the two groups (ACP 97.8% vs. WATCHMAN 96.9%, p=0.987). The safety endpoint occurred in 3.3% (n=3) of ACP and 3.1% (n=2) of Watchman and there was no difference (p=0.975). At 1 year follow up, the efficacy endpoint was not different between the two groups (ACP 4.5% (n=4) vs. WATCHMAN 1.5% (n=1), p=0.219)

Conclusion: In the early learning period, procedural success rate of LAAO in Korea multicenter registry appears to be excellent and similar in the safety and efficacy between the ACP and the WATCHAMAN.

P6388

Quality of life in patients after the left atrial appendage closure

M. Komar[1], T. Przewlocki[1], D. Dudek[2], U. Gancarczyk[1], A. Gackowski[3], D. Sorysz[2], P. Prochownik[2], P. Podolec[1]. *[1]Jagiellonian University Medical College - John Paul II Hospital - Department of Cardiac & Vasculare, Krakow, Poland; [2]The 2nd Department of Cardiology and Cardiovascular Interventions, University Hospital, Krakow, Poland; [3]Department of Coronary Disease and Heart Failure, John Paul II Hospital, Krakow, Poland, Krakow, Poland*

The aim of the study was to determine the quality of life in patients after transcatheter closure of left atrial appendage (LAAO) in 12 months follow-up.

Methods: Consecutive 50 adult patients (23 F, 27 M) with a mean age of 67.8±8,5 (48–82) with nonvalvular atrial fibrillation (permanent – 20; persistent – 11; paroxysmal – 19) and contraindication to anticoagulation therapy, who underwent transcatheter left atrial appendage occlusion between August 2014 and October 2017, were analyzed.

Quality of life was measured using the SF36 questionnaire (SF36q). Scores were transformated to a scale of 0–100, where higher scores represent higher functioning. The items were assigned to 8 subscales: physical functioning (PF), role-functioning (RP), bodily pain (BP), general health (GH), vitality (VT), social functioning (SF), role-emotional (RE) and mental health (MH). The first of these four elements (PF, RP, BP, GH) create physical component summary (PCS), the other four (VT, SF, RE, MH) - mental component summary (MCS).

SF36q were repeated in all pts before procedure, 45 days, 3 and 12 months of follow-up as well as transesophageal echocardiography (45 days after procedure) and transthoracic echocardiography (45 days, 3 and 12 months).

Results: The LAA device was implanted in all patients (Watchman device – 24 pts, Amplatzer Amulet device – 26 pts), one procedure was complicated by pericardial effusion. Controlled transesophageal echocardiography (TEE) 45 days after device implantation revealed minimal residual shunt in 4 patients (8%) which removed at 3 months follow-up. TEE performed 45 days after LAAO showed thrombus on the device in 3 patients (6%). Anticoagulation therapy (low molecular weight heparin) was prescribed and the clots dissolution was obtained after 12 month follow-up in all patients.

All of the QoL parameters improved 12 months follow up as compared to their baseline data. The mean SF36q scale increased significantly in 38 (76%) pts of mean 10.2±7.07 after 12 months observation. The mean PCS increased significantly in 35 (70%) $p<0.001$ as well as the mean MCS in 27 (54%) pts, $p<0.001$ 12 months after the procedure (Table 1).

Conclusions: Transcatheter closure of LAA is a safe and effective procedure and caused significant improvement of quality of life, measured by SF36 questionnaire in 12 month follow-up.

P6389

Arterial stiffness and indices of diastolic heart failure as predictors of ischemic strokes of undetermined etiology

A. Bielecka-Dabrowa[1], P. Gasiorek[1], A. Sakowicz[2], M. Banach[1]. *[1]Department of Hypertension, Chair of Nephrology and Hypertension, Medical University of Lodz, Lodz, Poland; [2]Medical University of Lodz, Department of Medical Biotechnology, Lodz, Poland*

Background: Approximately 1.1 million inhabitants of Europe suffer from a stroke

Abstract P6388 – Table 1

	Before LAA oclusion	45 days after LAA oclusion	3 months after LAA oclusion	12 months after LAA oclusion	p value before vs 45 days	p value before vs 3 months	p value before vs 12 months
PCS-physical component summary	50,41±25,66	57,29±27,91	54,84±26,1	59,79±26,07	<0.001	<0.001	<0.001
MCS-mental component summary	55,63±23,54	66,14±22,82	65,37±21,24	69,37±20,79	<0.001	<0.001	<0.001
GH-general health	43,04±8,54	47,22±12,84	42,75±16,22	48,75±15,14	<0.001	<0.001	<0.001