MedD Score was higher in women compared to men (28.8±2.0 vs 20.1±2.5; p<0.001). In the group of patients with AF the MedD Score was higher in women compared to men (24.3±2.0 vs 19.1±2.2; p<0.001). Comparing women with AF and women without AF the MedD Score was lower in AF group (24.3±2.0 vs 27.9±5.6; p<0.001). Similarly, men with AF had a lower adherence to MedD Score (19.1±2.2 vs 21.4±2.5; p<0.001). In pts with AF the estimated intake of total antioxidants was higher in women compared to men (19.9±5.6 vs 11.2±7.4 mmol/d; p<0.001). Women from control group had a higher estimated intake of total antioxidants compared to women with AF (22.3±7.1 vs 19.9±5.6 mmol/d; p<0.05). The analysis of sources of antioxidants showed that women with AF had a higher intake from vegetables and fruits, on contrary men with AF had a higher intake from cereals and coffee. Women were more likely to be tea consumers compared with men. Low level of antioxidants intake was also associated with an increasing risk of developing AF (O.R. 1.9; 95% CI 1.65-3.2; P<0.01).
Conclusions: Women showed high adherence to MedD and higher intake of antioxidant form fruit and vegetables compared to AF men. Men had higher intake of antioxidants from coffee. Women that developed AF were older, with lower adherence to MedD, and more sedentary

P4271 | BENCH
Reduced kidney function and anemia as risk factors for new onset AF

D.Z. Xu[1], N. Murakoshi[1], T. Sairenchi[2], F. Irie[3], M. Igarashi[3], T. Tomizawa[4], I. Yamaguchi[4], H. Iso[5], H. Ota[4], K. Aonuma[1]. *[1]Cardiovascular Division, Institute of Clinical Medicine, Tsukuba, Japan; [2]Dokkyo Medical University School of Medicine, Department of Public Health Medicine, Tokyo, Japan; [3]Department of Health and Welfare, Ibaraki Prefectural Government, Tokyo, Japan; [4]Ibaraki Health Service Association Institute, Ibaraki, Japan; [5]Osaka University, Graduate School of Medicine, Division of Health Sciences, Osaka, Japan*

Background: Each of chronic kidney disease (CKD) and anemia is a potential independent risk factor for cardiovascular disease (CVD); however, reduced kidney function, anemia, and its relationship have not been fully evaluated for the incidence of atrial fibrillation (AF).
Objective: We sought to evaluate the impact of kidney function, hemoglobin and their combination on new onset AF in population-based cohort study.
Methods: We conducted a 15-year prospective cohort study of 194,333 persons aged 40-79 years who participated in annual health checkups in 1993 to 2008. Estimated glomerular filtration rate (eGFR) was classified as eGFR ≥90 ml/min per 1.73 m^2 (normal eGFR group), 60 ≤ eGFR <90 mL/min per 1.73 m^2 (mild CKD group), and eGFR <60 mL/min per 1.73 m^2 (CKD group), The hemoglobin (Hb) was classified as normal Hb group (15 g/dl ≤ Hb < 18 g/dl in male and 13 g/dl ≤ Hb < 16 g/d in female); borderline Hb group (13 g/d ≤ Hb < 15 g/d in male and 11g/d ≤ Hb < 13 g/d in female) and anemia group (Hb < 13 g/dl in male and for Hb < 11 in female). Kaplan-Meier survival analysis was used to compare free from new onset of AF between groups classified by level of eGFR grade, hemoglobin grade, and their interaction. The Cox-proportional hazard model was used to estimate the hazard ratios (HRs) for new onset AF, after adjusting age, sex and other cardiovascular risk factors.
Results: During the mean follow up of 13.8 years, 1,237 new onset of AF (0.93%) were identified. Lower eGFR and lower hemoglobin grades were significantly associated with a higher prevalence of new onset AF. The multivariable HRs and 95% confidence intervals (CIs) of new onset AF was 1.37 (1.21 – 1.55) for mild CKD group, 2.55 (2.08 -3.12) for CKD group; and 1.50 (1.24 – 1.83) for anemia grade. Borderline hemoglobin level was not significantly associated with increased risk for new onset AF (HR = 1.07 CI: 0.91 – 1.25 P = 0.4284). In the model with interaction term between CKD and anemia, the risk was significantly higher (P = 0.0343 for the interaction) than that predicted by both factors independently.
Conclusion: Decreased kidney function and lower hemoglobin level are risk factors for new onset AF, especially when both are present.

P4272 | SPOTLIGHT 2013
Renal Function and outcomes in atrial fibrillation catheter ablation: is it really predictive and which formula to use?

R.A. Providencia, S. Combes, S. Boveda, B. Casteigt, A. Bouzeman, H. Hireche, J.P. Albenque. *Clinic Pasteur of Toulouse, Toulouse, France*

Introduction: Chronic kidney disease (CKD) has been associated with a worse outcome after catheter ablation of atrial fibrillation (AF). Controversy still exists concerning the best formula to assess glomerular filtration rate (GFR): Cockroft-Gault (CG), Modification of Diet in Renal Disease (MDRD) or the CKD Epidemiology Collaboration (CKD-EPI). We intended to evaluate and compare the three formulae in the setting of catheter ablation of AF.
Methods: All patients undergoing catheter ablation of AF from October 2010 to January 2012 in our institution were assessed for the following 3 endpoints: early relapse (<72 hours), peri-procedural complications and relapse during follow-up. We divided our population according to the Stages of Chronic Kidney Disease of the National Kidney Foundation KDOQI Guidelines using the three different formulae. Receiver operator characteristic curves were traced for assessing the discriminative capability of the 3 classifications.
Results: 473 patients (Age 60.8±9.7; 41.9% ♀; 58.1% paroxysmal AF; CHA2DS2-VASc1.5 ±1.3) were followed during an average of 11.3±6. 6months.
Conclusions: During the follow-up of our cohort, GFR levels were not associated with the presence of late relapses. However, both MDRD and CKD-EPI displayed a low to moderate discriminative capability concerning the prediction of early relapses. CK was the most accurate formula for the discrimination of peri-procedural complications.

Abstract P4272 – Table 1

	<30 ml/min/m^2	30–59 ml/min/m^2	60–89 ml/min/m^2	≥90 ml/min/m^2	P	AUC
MDRD						
Peri-procedural complications	20%	26.2%	6.5%	14.8%	<0.001	0.601 (p=0.017)
Early relapse	20%	6.0%	6.8%	0%	0.108	0.606 (p=0.060)
Late relapse	33.3%	29.2%	27.1%	24.5%	0.942	0.484 (p=0.888)
CG						
Peri-procedural complications	40%	15%	8.5%	6.4%	0.003	0.645 (p=0.001)
Early relapse	20%	5.0%	7.6%	1.3%	0.046	0.553 (p=0.344)
Late relapse	28.6%	28.3%	26.4%	26.8%	0.983	0.484 (p=0.618)
CKD-EPI						
Peri-procedural complications	20%	23.7%	6.8%	13.6%	<0.001	0.615 (p=0.007)
Early relapse	20%	5.4%	7.1%	0%	0.080	0.607 (p=0.058)
Late relapse	33.3%	25.3%	27.7%	26.7%	0.971	0.496 (p=0.893)

P4273 | BEDSIDE
Female gender was not associated with the history of thromboembolism in patients with atrial fibrillation: from the Fushimi AF registry

H. Ogawa[1], T. Unoki[1], M. Ishii[1], M. Esato[2], Y.H. Chun[2], H. Tsuji[3], H. Wada[1], K. Hasegawa[1], M. Abe[1], M. Akao[1] on behalf of the Fushimi AF Registry investigators. *[1]Kyoto Medical Center, National Hospital Organization, Kyoto, Japan; [2]Ijinkai Takeda General Hospital, Kyoto, Japan; [3]Tsuji Clinic, Kyoto, Japan*

Purpose: Atrial fibrillation (AF) increases the risks of thromboembolism and death, and the prevalence of AF is increasing significantly (reportedly, 0.6% of total population in Japan). Female gender is considered a risk factor for thromboembolism in patients with AF, and is included in the risk stratification scheme, CHA2DS2-VASc score as Sc (sex category) factor. We investigated the impact of female gender on the thromboembolism in Japanese cohort of AF patients.
Methods: The Fushimi AF Registry, a community-based prospective survey, was designed to enroll all of the AF patients living in Fushimi-ku, Kyoto, which is a typical urban district of Japan with a population of 283,000. At present, we have enrolled 3,379 Japanese AF patients (1.2% of total population) from March 2011 to December 2012. We investigated clinical background, comorbidities and medications of female patients (n=1,383, 40.9%).
Results: Female AF patients were older than male (77.5 vs. 71.9 years of age; p<0.01), had lower body weight (50.5 vs. 64.2 kg; p<0.01), and lower body mass index (22.3 vs. 23.3 kg/m^2; p<0.01). CHADS2 score, and CHA2DS2-VASc score excluding Sc factor were greater in female patients (2.22 vs. 2.01; p<0.01: 3.19 vs. 2.90; p<0.01). Female AF patients were more likely to have heart failure (32.8% vs. 24.0%; p<0.01), less likely to have diabetes (20.2% vs. 25.4%; p<0.01) and previous myocardial infarction (5.0% vs. 7.3%; p<0.01). Hypertension was comparable between female and male (61.8% vs. 60.8%; p=0.55). Despite that the prescription of oral anticoagulants was less in female (46.6% vs. 53.3%; p<0.01), the history of stroke or systemic embolism was not different (20.9% vs. 22.8%; p=0.27).
Conclusion: The Fushimi AF Registry provides a unique snapshot of current realworld AF patients in an urban community in Japan. Female gender was not associated with the history of stroke or systemic embolism, in spite of the lower prescription of oral anticoagulants in female AF patients. Female gender may not be a risk of thromboembolism, at least in Japanese AF patients.