Clinical Modification- ICD- 9CM codes undergoing orthopedic surgery to fix underlying fracture also having concurrent AF (ICD9 CM 427.31). Only patient aged 18 years and above were included. We investigated impact of AF on mortality and length of stay (LOS). Chi square was used to compare categorical variable and t test was used for continuous variables. Hirearchial mixed effect logistic multivariate model were used to predict independent predictor of outcome.

Results: We studied 2,112,951 (unweighted N=437,415) admissions for hip fracture from 2005 to 2014 (Mean age 79.11±0.01 years, Male 70.48%, Caucasian 73.46%). Out of these 18.47% patients had concurrent atrial fibrillation (Mean age 83.8±0.02 years, Male 67.53%, Caucasian 78.28%). Majority of patient (83.83%) had CHA_2DS_2-VASc score between 3 to 5. Rate of bleeding complication was 29.61% in patient with atrial fibrillation compared to 29.02% in patient without AF (P<0.01). All cause mortality was significantly higher in patients with AF compared to those without AF (3.99% vs 1.5%, P<0.001). On multivariate analysis, AF was found to be an independent predictor of mortality (OR 2.02, 95% CI 1.92–2.13, p<0.01) and post op neurological complications (1.18, 1.10–1.26,p<0.01). Overall LOS was also higher in patient with AF (7.14 vs 5.78 days, Mean 6 days, p<0.01).

Conclusion: AF is an independent predictor of increased mortality in patients admitted with hip fracture undergoing surgery for the same. Further studies for risk stratification should be done in this population.

P970
Influence of diabetes mellitus on survival of patients with atrial fibrillation - A population-based study

S.H. Patlolla, H.C. Lee, B.J. Gersh, W.E. Wysokinski, R.M. Melduni. *Mayo Clinic, Cardiovascular Diseases, Rochester, United States of America*

Background: Although diabetes mellitus (DM) has been established as a risk factor for developing atrial fibrillation (AF), it is unclear whether DM adversely influences the clinical course of patients with AF.

Purpose: To determine the effect of DM on the overall survival of patients (pts.) with AF.

Methods: During the period from January 1, 1994 to December 31, 2012, 5998 Olmsted County, MN pts with incident AF were retrospectively analyzed to examine the impact of DM on their clinical course. The diagnosis of DM was established by ICD-9 codes from the medical records. The primary endpoint was death from any cause. The overall survival was determined and compared using a Kaplan-Meier analysis and the log-rank test. Cox regression analysis was used to identify the independent factors associated with mortality.

Results: We identified 1317 (21.9%) pts with both AF and DM and 4681 pts with AF without DM (mean age 72.9±14.7 years; 49.1% women). The AF with DM group was significantly more likely to have cardiovascular comorbidities including hypertension (HTN), dyslipidemia, prior myocardial infarction (MI), heart failure (CHF), stroke, obstructive sleep apnea and more likely to be treated with beta-blockers, calcium-channel blockers, diuretics, anti-platelets, warfarin than patients with AF without DM (All P-values <.001). During a median follow up period of 6.53 years, Kaplan-Meier analysis showed that the presence of DM was associated with a significantly reduced survival time in pts with AF (DM vs non-DM, 4.89 vs 7.15 years, Log-rank P<0.001). On multivariable logistic regression analysis, after adjusting for age, sex, BMI, HTN, previous MI, CHF, stroke, chronic obstructive pulmonary disease, use of β-blockers, Ca+2 channel blockers, anti-platelets, warfarin, anti-arrhythmics, DM was an independent predictor of poor survival in patients with AF, HR 1.51, 95% CI (1.29–1.76). The use of β-blockers, Ca+2 channel blockers, warfarin and anti-arrhythmics conferred a significant protective effect on survival of patients with the comorbidity of DM (All P-values <.001).
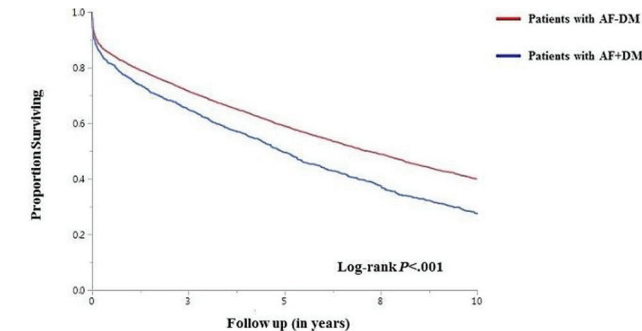
Conclusion: The comorbidity of DM represents an independent predictor of reduced survival in patients with AF. The use of β-blockers, Ca+2 channel blockers, warfarin and anti-arrhythmics appear to confer a significant protective effect on survival.

P971
Assessment of the CHA2DS2-VASc score in predicting new onset atrial fibrillation during hospitalization for community-acquired pneumonia

F. Pieralli[1], B. Biondo[1], V. Vannucchi[2], E. Antonielli[1], G. De Marzi[1], C. Casati[1], F. Corradi[1], A. Morettini[1], C. Nozzoli[1]. [1]*Careggi University Hospital (AOUC), Florence, Italy*; [2]*Hospital of Santa Maria Nuova, Florence, Italy*

Background: Cardiovascular events are common during hospitalization for community-acquired pneumonia (CAP), with new onset atrial fibrillation (NOAF) being the second most relevant complication.

Purpose: In this study, we aimed to investigate the role of CHA2DS2-VASc score in predicting NOAF during hospitalization for CAP.

Methods: This was a prospective study on patients admitted for CAP. The endpoint of the study was the occurrence of any objectively documented episode of NOAF during hospitalization in people without preexisting atrial fibrillation (AF).

Results: Four-hundred-sixty-eight patients were enrolled (median age 78 years), of these 48 (10.3%) experienced NOAF during hospitalization. They were older, had a greater number of comorbidities, more severe pneumonia, and higher values of CHA2DS2-VASc (4.4±1.6 vs 3.4±1.9; p<0.0001). There was an incremental relationship between the progression in CHA2DS2-VASc score and the risk of NOAF. At ROC curve analysis, a CHA2DS2-VASc score >3 was the most accurate cut-off for the identification of NOAF (AUC 0.653; 95% CI 0.577–0.729; p=.001). Each CHA2DS2-VASc point increase and a score >3 independently amplified the risk of NOAF at multivariate analysis (HR 1.3; 95% CI 1.09–1.55; p=.003 and 2.3; 95% CI 1.19–4.44; p=.007, respectively).

Conclusions: CHA2DS2-VASc score is an accurate and independent predictor of NOAF in patients with CAP, and a score >3 features a population at high risk of AF during hospitalization. This simple and accurate tool could help to better identify patients at higher risk of NOAF, and should be incorporated in the thorough evaluation of people hospitalized for CAP.

P972
Relationship between myocardial injury and early recurrence after pulmonary vein isolation in radiofrequency catheter ablation and cryoballoon ablation

M. Yano, M. Nishino, M. Yasunaga, K. Yanagawa, H. Nakamura, Y. Matsuhiro, K. Yasumura, K. Yasumoto, A. Tanaka, N. Mori, D. Nakamura, Y. Egami, R. Shutta, J. Tanouchi. *Osaka Rosai Hospital, Division of cardiology, Sakai, Japan*

Background: High sensitive cardiac troponin I (hs-TnI), subunit of cardiac troponin complex, is a sensitive and specific marker of myocardium injury as troponin T. Previous reports demonstrated that troponin I was more sensitive in hyperacute phase and less susceptible to hemolysis than troponin T. Several studies showed hs-TnI was associated with worse cardiovascular outcomes, but relationship between serum hs-TnI level in patients with atrial fibrillation (AF) after pulmonary vein isolation (PVI) and early recurrence remains unclear.

Methods: We enrolled 141 patients with AF who underwent PVI (R group, radiofrequency catheter ablation, n=92; C group, cryoballoon ablation, n=49). We evaluated early recurrence (<3months) of AF (ERAF) in all study patients. We compared serum hs-TnI, high-sensitive C reactive protein (hs-CRP), white blood cell (WBC) at 48 hours after PVI and body temperature (BT, maximum value after PVI and at discharge) between patients with ERAF and those without ERAF in R group and C group, respectively.

Results: There were no significant differences in patient characteristics between R group and C group. Serum hs-TnI in R group was significantly lower than in C group (1.71 ng/ml vs 4.72 ng/ml, p<0.001). The incidence of ERAF was similar between the two groups (R group: 31.5% (n=29) and C group: 24.5% (n=12), p=0.108). In both groups, there was no significant difference of serum hs-TnI, hs-CRP, WBC and body temperature (maximum after PVI and at discharge) between patients with ERAF and those without ERAF (Table).

Clinical outcome between R and C groups

	Radiofrequency catheter ablation			Cryoballoon ablation		
	ERAF(+)	ERAF(−)	P value	ERAF(+)	ERAF(−)	P value
hs TnI, ng/ml	1.80±2.45	1.51±1.90	0.574	4.69±2.93	4.83±2.39	0.879
hs CRP, mg/dl	1.91±1.77	2.53±3.11	0.227	1.22±1.02	0.79±0.48	0.159
WBC, /μl	6580±1729	6731±1741	0.700	6392±2373	6900±1242	0.338
Max BT, degree Ce	37.1±0.41	37.1±0.44	0.638	37.2±0.34	37.1±0.30	0.719
BT at discharge, degree Ce	36.3±0.35	36.3±0.29	0.931	36.3±0.35	36.3±0.45	0.841

Conclusion: In cryoballoon ablation, hs-TnI was significantly higher than in radiofrequency catheter ablation, but no significant difference of early recurrence of AF after PVI was confirmed between both groups. Cryoballoon ablation may cause more myocardial injury than radiofrequency catheter ablation, but these phenomena did not affect ERAF after PVI.