

Conclusion. Achieving rhythm control with D.C. cardioversion does not improve coagulation or platelet markers in patients with AF. This study may in part explain why rate control with anticoagulation seems superior to rhythm control in patients with AF.

1129-213 Which Patients With Atrial Fibrillation or Atrial Flutter Benefit From Electrical Cardioversion?

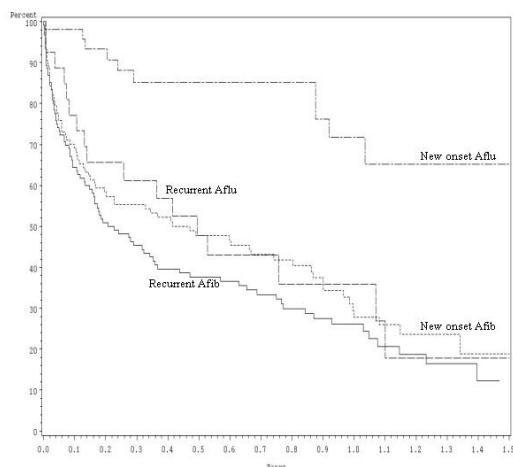
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Background: Optimal management of new onset atrial fibrillation (Afib) or flutter (Aflu) is not known. We sought to determine the recurrence rate of atrial arrhythmia post electrical cardioversion (DCCV) of new onset Afib and Aflu.

Methods: A cohort of 244 patients (pts) with documented Afib (119 with new onset Afib) and 79 pts with Aflu (52 with new onset Aflu) were followed after DCCV for recurrence. Post-surgical pts with Afib or Aflu were excluded. Cox proportional hazards models were used to construct multivariate models.

Results: The mean age was 71.1 ± 12.4 years with 69% being males, 30% had coronary artery disease, 19% had congestive heart failure and 68% had hypertension. The mean follow up was 159.5 ± 171.2 days. Pts with recurrent Afib (57.6%) or recurrent Aflu (63%) were more likely to be on antiarrhythmic medications than pts with new onset Afib (19.3%) or new onset Aflu (3.9%), $p < 0.05$. In a multivariate model, pts with a bigger right atrial size ($p = 0.02$) or mitral valve disease ($p < 0.01$) were more likely to have recurrence of atrial arrhythmia. Use of antiarrhythmic medications had no effect on recurrence. Pts with new onset Aflu were less likely to recur after DCCV than pts with new onset Afib or either recurrent Aflu or Afib, $p < 0.001$ (see figure).

Conclusion: DCCV for pts with new onset Aflu is a reasonable strategy with 65% of pts maintaining sinus rhythm at 1.5 years of follow-up. Only 20% of pts with Afib or recurrent Aflu remained in sinus rhythm at 1.5 years of follow-up.



Percentage of patients that maintained sinus rhythm at follow-up following DCCV versus time in years, $p < 0.001$.

1129-214 Atrial Fibrillation and Heart Failure: Preserved Systolic Function Does Not Predict a Benign Prognosis

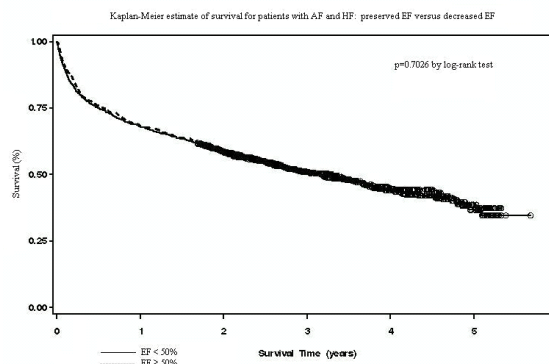
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Background: The prognostic significance of preserved systolic function in heart failure (HF) and atrial fibrillation (AF) is controversial.

Methods: To determine the impact of ventricular function (EF) on mortality associated with AF and HF data were reviewed from consecutive patients presenting to the emergency department at Brigham and Women's Hospital from January 1998 to December 2001 who had both AF and HF and a measure of EF. Vital status was determined from the Social Security Death Index. Survival analysis was performed.

Results: A total of 1759 patients met entry criteria (mean age 73 ± 12 yrs, 44% women). EF was preserved ($> 50\%$) in 42%. No difference in median survival was found amongst patients with an EF $> 50\%$ (3.30 yrs, 95% CI (2.70, 3.79)) compared to those with an EF $\leq 50\%$ (3.19 yrs, 95% CI (2.73, 3.67)) ($p = 0.70$), even after adjustment for age, gender, creatinine (Cr) and QRS duration. In multivariate analysis older age, male gender and increased Cr were predictive of increased mortality.

Conclusion: Patients with atrial fibrillation, heart failure and preserved EF have similar mortality to those with depressed EF. Further study is needed to assess the impact of therapies and clarify the reasons for poor prognosis.



1129-215 Energy Selection for Elective External Direct Current Cardioversion: A Randomized Comparison of High Initial Energy and Conventional Step-Up Protocol

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BACKGROUND: Current guidelines recommend a step-up energy protocol for the cardioversion of atrial arrhythmias. The aim of this study was to compare such a protocol with a protocol involving an initial high energy shock.

METHODS: This prospective single-blind study enrolled 261 consecutive patients (mean age 71 ± 10 years, 62% male) referred for elective transthoracic cardioversion of persistent atrial fibrillation (AF). Patients were randomised to either protocol A: (1) 200J anteroapical (AA), (2) 360J AA, (3) 360J anteroposterior (AP) or protocol (B): (1) 360J AA (2) 360J AP and (3) 360J posteroanterior (PA).

All procedures were performed under deep sedation with intravenous diazepam.

RESULTS: Both procedures resulted in similar success rates after the maximum of 3 shocks (A 82%, B 87%, $p = 0.3$), however there was a highly significant increase in 1st shock success for protocol B, 68%, versus 41% for protocol A, $p < 0.0001$. Protocol B resulted in significantly fewer shocks to achieve sinus rhythm as compared to protocol A (1.3 ± 0.6 versus 1.6 ± 0.7 , $p = 0.0002$). There were no differences in cumulative energy used (group A, 473 ± 286 J, versus group B, 436 ± 273 J, $p = 0.24$) or sedation requirements (group A, 22 ± 9 mg, group B, 22 ± 9 mg, $p = 0.7$).

CONCLUSION: High initial energy cardioversion for atrial fibrillation increased 1st shock success and decreased shock frequency but resulted in similar overall conversion rates, cumulative energy and use of sedation compared with conventional step-up protocol. Reversal of polarity should be considered in patients who fail initial shocks.

1129-216 How Does Age Influence the Prescribing of Antithrombotic Therapy for Ambulatory Patients With Permanent Atrial Fibrillation?

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Background: Prescription of antithrombotics in Atrial Fibrillation (AF) patients (pts) and its determinants in elderly patients are not well known. We undertook a survey in ambulatory AF patients in France.

Methods: We prospectively surveyed consecutive outpatients with documented permanent AF with or without valvular disease, excluding those with valvular prostheses. Cardiologists or general practitioners were selected at random.

Results: 5893 pts were included by 188 cardiologists (2367 pts) and 582 general practitioners (3526 pts). Their mean age was 75.8 years, 58% were men, 31.7% had Valvular disease.

Overall, 95.5% of pts were being prescribed an antithrombotic drug, including vitamin K antagonists (VKA) in 76.4% of pts and aspirin in 16.6%.

Higher age was a strong predictive factor for lower prescribing of antithrombotic therapy, even after multivariate adjustment for other factors with a significant negative influence on prescribing, such as poor autonomy, history of severe hemorrhage and potentially haemorrhagic diseases.

Above 80 years, 7.4% of pts were not receiving antithrombotic prophylaxis.

Among pts receiving an antithrombotic therapy, the use of VKA decreased sharply after 75 years in favor of aspirin (figure)

Conclusions: In our study, a majority of ambulatory patients with permanent AF were