

Conclusions First study investigating FMD in patients with permanent AF and hypertension together to assess whether presence of AF worsens the endothelial dysfunction seen in patients with hypertension. Endothelium-dependent FMD is impaired in patients with AF and hypertension. The presence of AF does not incrementally worsen endothelial dysfunction, nor was AF an independent predictor of endothelial dysfunction on multivariate analysis.

Conflict of Interest undefined

70

ATRIAL FIBRILLATION IS ASSOCIATED WITH LONG-TERM MORTALITY IN PATIENTS UNDERGOING SURGICAL AORTIC VALVE REPLACEMENT

¹Mohamed Farag, ¹Marta Peverelli, ^{1S} Ashwin Reddy, ²Nikolaos Spinthakis, ¹Mohamed Osman, ²Keith Sullivan, ²Diana A Gorog, ¹Unni Krishnan, ¹Samer Nashef. ¹Royal Papworth Hospital NHS Foundation Trust, Cambridgeshire, UK; ²Postgraduate Medical School, University of Hertfordshire, Hertfordshire, UK

10.1136/heartjnl-2020-BCS.70

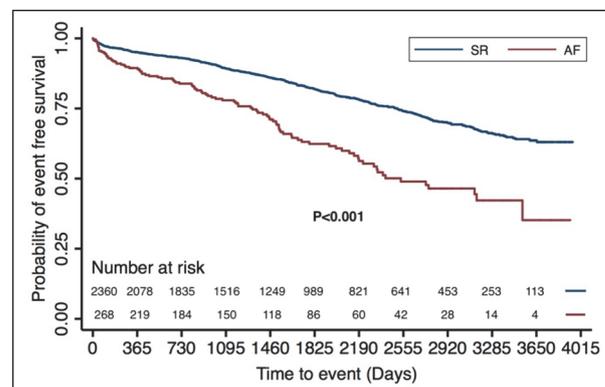
Introduction Atrial fibrillation (AF) is common in patients with aortic valve disease, although the exact mechanism is unclear. New-onset AF is frequent after any open-heart surgery, but evidence suggests it may have no significant impact on survival if sinus rhythm (SR) is effectively restored early after the onset of the arrhythmia and before hospital discharge. In contrast, management of preoperative persistent AF is often overlooked during or after open-heart surgery despite several proposed protocols. This study sought to evaluate the impact of preoperative persistent AF on mortality in patients undergoing isolated surgical aortic valve replacement (AVR).

Methods Retrospective, single-centre study involving 2,628 consecutive patients undergoing elective primary isolated AVR

Abstract 70 Table 1 Baseline patient characteristics

	AF(n=268)	SR(n=2360)	P Value
Age, yrs	77±7	71±11	<0.001
Female	113 (42.2)	1126 (47.7)	0.093
Body Mass Index	28.7±5.7	28.6±5.6	0.808
Valve type			
Biological	248 (92.5)	2052 (86.9)	0.008
Mechanical	20 (7.5)	308 (13.1)	
Bypass time, min	73±25	74±26	0.795
Aortic clamp time, min	53±16	54±17	0.360
Valve pathology			
Aortic stenosis	259 (96.6)	2237 (94.8)	0.237
Aortic regurgitation	9 (3.4)	123 (5.2)	
Hypertension	202 (75.4)	1396 (59.2)	<0.001
Diabetes Mellitus	60 (22.4)	402 (17.0)	0.034
Creatinine (µmol/L)	105±43	92±35	<0.001
Chronic pulmonary disease	61 (22.8)	425 (18.0)	0.067
Peripheral vascular intervention	33 (12.3)	150 (6.4)	<0.001
Current smoker	10 (3.7)	125 (5.3)	0.309
Cerebral vascular accident	13 (4.9)	63 (2.7)	0.053
Myocardial infarction	27 (10.1)	143 (6.1)	0.017
Poor left ventricular function (EF <30%)	38 (14.2)	121 (5.1)	<0.001
Euroscore I	7.9±2.4	6.3±2.4	<0.001
Logistic Euroscore	11.9±9.5	7.4±6.7	<0.001

Values presented as mean SD or n (%)



Abstract 70 Figure 1 Kaplan-Meier survival curves showing significantly lower event free survival in patients with atrial fibrillation

from 2008 to 2018. A total of 268/2,628 patients (10.1%) exhibited persistent AF before surgery. The effect of preoperative AF on long-term mortality was evaluated with univariate and multivariate regression analyses.

Results Statistically significant differences were observed in patients' age, history of hypertension, diabetes, myocardial infarction, preoperative creatinine level, left ventricular function and EuroSCORE between AF and SR groups [Table 1]. In-hospital mortality was 0.8% and was not different between AF and SR groups. AF was highly predictive of long-term mortality (median follow up of 4 years [IQR 2-7]; HR: 2.24, 95% CI: 1.79–2.79, $p < 0.001$) [Figure 1], and remained strongly and independently predictive after adjustment for other risk factors (HR: 1.54, 95% CI: 1.23–1.94, $p < 0.001$). Other independent predictors of long-term mortality included advanced age, presence of diabetes, chronic pulmonary disease, peripheral vascular intervention, poor left ventricular function and elevated preoperative creatinine level.

Conclusions The presence of preoperative AF in patients undergoing isolated AVR was affected by many risk factors and was associated with a higher EuroSCORE. Preoperative AF was independently predictive of long-term mortality in this cohort. It remains to be seen whether concomitant surgery or other preoperative measures to correct AF may impact long-term outcomes.

Conflict of Interest None

71

SAFETY OF THE USE OF DIRECT ORAL ANTICOAGULANTS (DOACS) IN MORBIDLY OBESE PATIENTS WITH NON-VALVULAR ATRIAL FIBRILLATION (NVAF) UNDERGOING ELECTIVE DIRECT-CURRENT CARDIOVERSION (DCCV)

¹Siddhartha Mohan, ¹Ashwin Roy, ¹Geoff Kidd, ¹Andy Lapper, ²Sanjiv Petkar. ¹Royal Wolverhampton Trust (New-Cross Hospital); ²The Royal Wolverhampton NHS Trust

10.1136/heartjnl-2020-BCS.71

Introduction Direct Oral Anticoagulants (DOACs) are rapidly replacing warfarin as drugs of choice for stroke prophylaxis in patients with non-valvular atrial fibrillation (NVAF). Advantage of DOACs over warfarin include fixed dosing, predictable pharmacokinetics, less interaction with food/ medication and no requirement for frequent monitoring of their therapeutic efficacy. Obesity is a risk factor for the development of AF.