Conflict of Interest Nil

41 DOES PROGRESSIVE FIRST DEGREE AV BLOCK INDICATE THE NEED FOR PACING?

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Background First-degree AV block, though considered benign, has been reported to be associated with an increased risk for atrial fibrillation, permanent pacing, heart failure and all-cause mortality. It is possible the extent of PR prolongation indicates the severity of adverse outcome. This study investigated whether the length of PR and its change with heart rate can predict the need for permanent pacing.

Method We studied 21 patients with a PR over 270 ms. Nine patients underwent permanent pacing for symptomatic bradycardia or complete AV block and 12 did not. Two or more PR intervals and corresponding heart rates were measured. The unit change in PR to heart rate was calculated and defined as PR Index. We compared the two groups by Student T test or Fisher Chi Square test.

Result Age, sex distribution and baseline heart rate were similar in the two groups. The baseline mean PR interval was 70 ms greater (though did not reach statistical significance), a PR interval over 350 ms was more common (7/9 vs 3/12), the mean corrected PR interval by heart rate was significantly longer and the PR index was significantly higher in patients who were paced than in those who were not (all $p < 0.05$).

Conclusion A very long PR interval may lead to AV dissociation requiring permanent pacing. A PR interval over 350 ms and an exaggerated prolongation of PR per given decrease in heart rate may indicate a high risk of AV dissociation, hence the need for permanent pacing.

Conflict of Interest None

42 ATRIAL FIBRILLATION AND LONG-TERM SURVIVAL IN SOUTH ASIANS: INSIGHTS FROM THE UK ACALM REGISTRY

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Abstract 42 Figure 1 KM curve showing long term survival of Caucasian and South Asian AF patients

Background Atrial Fibrillation (AF) is the most common cardiac arrhythmia and is an independent risk factor for mortality. However, the impact of race has not been fully explored. We evaluated the frequency, clinical characteristics, and long-term survival in South Asian and Caucasian White patients with AF using a 'big data' approach.

Methods Using the United Kingdom (UK) Algorithm for Comorbidity, Associations, Length of stay, and Mortality (ACALM) registry, we analyzed 1,816,230 adults hospitalized between January 2000 and July 2014 using ICD-10 and OPCS-4 coding systems. Ethnic status was identified and AF patients were selected. Using logistic regression, we examined the odds of mortality adjusted for demographics and co-morbid status.

Results In our large cohort, South Asian patients had a lower frequency of AF hospitalization compared with Caucasian White patients (0.8% [1876/243,363] versus 4.5% [51,576/1,151,222], $p < 0.001$). Differences in demographics and baseline characteristics are highlighted in the table below. Kaplan-Meier survival was worse in Caucasian White patients with AF (figure 1). Following adjustment, White race was associated with a higher long-term mortality compared with South Asian ethnicity in patients with AF (HR 1.38, 95% CI 1.26–1.51, $p < 0.001$).

Conclusion In a 'big data' UK registry, AF hospitalization in South Asians appears less common and is associated with improved survival compared with Caucasian White patients.

Abstract 42 Table 1

	South Asian (n=1876)	Caucasian White (n=51,575)	p-value
Demographics			
Age (mean, SD)	65.5 (14.3)	74.2 (12.2)	<0.001
Female (%)	44.2	49.2	<0.001
Selected baseline characteristics			
Hypertension (%)	64.8	50.3	<0.001
Type 2 Diabetes (%)	43.2	17.3	<0.001
Prior MI (%)	10.7	7.2	<0.001
Prior heart failure (%)	12.3	13.6	0.883
Chronic kidney disease (%)	3.5	8.9	0.04
Charlson risk score	1.6 (1.5)	1.4 (1.5)	<0.001
Clinical Outcome			
1-year mortality %	5.5	15.7	<0.001