Results of atrial fibrillation screening in primary care setting in an urban cohort in north India

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Introduction: Atrial fibrillation (AF) is the most common sustained clinical arrhythmia with immense public health importance. There is paucity of prevalence data about AF in India. This study aimed to screen the presence of AF in patients presenting to a primary care clinic.

Methods: This was a prospective, observational study conducted over a period of one year from June 2018 to May 2019. 1500 consecutive patients were presenting to a primary care clinic in New Delhi were screened for presence of AF using 12 lead ECG after obtaining proper informed consent. Baseline data like height, weight, age, sex and presence of comorbidities like hypertension, diabetes and presence of known rheumatic heart disease (RHD) was taken after a comprehensive history and physical examination. The data was compiled in Microsoft Excel and statistics was done using SPSS V 19 (IBM).

Result: The mean age of patients screened was 53.8± 14.98 years and a mean BMI of 25.7± 5.63 kg/m². 823 (54.9%) patients were male. Out of 1500 patients screened 25 had ECG documented AF (prevalence of 1.7%). The mean age of patients with AF was 61.8± 15.80 years. 94 (6.3%) patients had known RHD, 703 (46.9%) were diabetics and 1043 (69.3%) had hypertension. Out of 25 patients with AF, 9 (36%) had history of rheumatic heart disease and 21 (84%) had hypertension. The mean age of patients with RHD was 51.8± 16.29 years compared to 63.9± 14.9 years in those with non-valvular AF.

Conclusion: AF prevalence in this primary care cohort was 1.7%. Hypertension was the most common comorbidity followed by rheumatic heart disease. Valvular AF presented a decade earlier than valvular AF.