



DESCRIPTIVE STUDY OF CLINICAL PROFILE OF PATIENTS WITH ATRIAL FIBRILLATION IN A MEDICAL COLLEGE HOSPITAL

Internal Medicine

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ABSTRACT

Atrial Fibrillation is the most commonly encountered quivering or irregular heart beat (arrhythmia) in our population. Atrial fibrillation is the most commonly encountered in day-to-day ICU care patients adding to the morbidity and mortality in such cases. The study was undertaken to study about clinical profile of AF, thus 115 patients with atrial fibrillation were taken up for study, after ethical committee clearance, and an informed consent, the patient's History, clinical and laboratory data were collected and analysed statistically. The most common age group affected in our study was between 61- 65 yrs. In our study ischemic heart disease was found to be the most common cause of atrial fibrillation. In present study majority of patients were associated with no habits followed by smoking. In present study Palpitation was the most common symptoms observed in patients with atrial fibrillation. In our study the most common complication of patients suffering from atrial fibrillation was heart failure. Majority of the patients were given medical treatment. Majority of the patients in atrial fibrillation were reverted. The mortality of patients with atrial fibrillation in our study was less than 15%.

KEYWORDS

AF (atrial fibrillation), Arrhythmia, Ischaemic heart disease

INTRODUCTION

Atrial fibrillation is the most common sustained arrhythmia worldwide. Atrial fibrillation is the most commonly encountered quivering or irregular heart beat in our population too, and it is the disordered supraventricular (atrial) event characterized by irregular heart rhythm, there by altered atrial electrical and mechanical function will occur, it will lead to significant economic burden to the society by causing morbidity and mortality. Its prevalence though less than 1 % in general population below 65 years old, its incidence and prevalence are in increasing trend. Male sex is the factor compared to female sex and moreover its incidence and prevalence is more in males than females, females develop atrial fibrillation later in life when compared to males. White people are more affected than black people. Most of the patients are initially asymptomatic in due course they will land up with lot of complications, limiting their day-to-day activities. Because of the abnormality in atrial activity there is abnormal atrial systolic event leading to ventricular dysfunction with reduced output, formation of thrombus in atrium leading to cerebrovascular accident and thromboembolic events. Pathophysiology of atrial fibrillation remain in controversy. There are so many diseases that are contributory to the development of atrial fibrillation, among them Rheumatic valvular heart disease is very important. Smoking and alcohol consumption are risk factors adding to the development of this dysrhythmias. Different diseases contributing to atrial fibrillation will appear at different ages, atrial fibrillation appearing because of valvular heart disease appears earlier than other diseases contributing to the development of atrial fibrillation. ECG shows irregular rhythm with normal or rapid rate, absent P waves, normal QRS complex. Main treatment modality is pharmacological, non-pharmacological treatment options reserved for some patients. Investigations are done to find out the causes for atrial fibrillation and guide the clinicians for treatment strategies. Echocardiography is useful to find out the causes for development of atrial fibrillation and various echocardiographic parameters predicts risk for future development of atrial fibrillation and various echocardiographic parameters predict risk for future development of atrial fibrillation and complications associated with atrial fibrillation.

AIM

To study the clinical profile of atrial fibrillation in a medical college hospital.

OBJECTIVES

To find out the various clinical presenting symptoms, possible

aetiologies in patients of atrial fibrillation. To assess the underlying heart disease, various complications and the outcome after treatment during hospital stay of atrial fibrillation patients.

MATERIALS AND METHODS

After taking due consent of the patient suffering from a Clinically and electrocardiographically diagnosed patient of atrial fibrillation, they were studied. Appropriate treatment of atrial fibrillation was started as soon as possible. After the initial primary treatment of the patient, a detailed history of the illness and relevant past history was obtained. All the routine investigations of the patient with CBC, RFT, LFT and ECG was done. Patient's ECG with long lead 2 was taken on admission, after 2hrs, 6hs, 24hrs and 48 hrs. The patients were then followed up throughout the hospital stay, outcome (either discharge or death) and also to look for possible complications.

Study Design: - Descriptive observational study.

Study Period: - 18 months

Place Of Study: - Tertiary Care Teaching Hospital

Sampling Method And Technique: The study population chosen after applying inclusion and exclusion criteria. Patients admitted during the study period were included in study.

Sample Size: Sample size was duration based. All the patients admitted in tertiary care hospital with atrial fibrillation after application of inclusion and exclusion criteria fulfilling consent were considered in the study. Thereby a total of 115 patients who fulfilled the criteria were considered for the study.

Inclusion Criteria

1. Patient age more than 18yrs.
2. Patients with clinically and electrocardiographically proven atrial fibrillation.
3. Patients giving consent to participate in the study.

Exclusion Criteria

1. Patients not willing to participate.
2. Patients with arrhythmias other than atrial fibrillation.

OBSERVATION AND RESULTS

DISCUSSION

Age

In present study most of the cases i.e., 27.83% had age between 61-65 years of age, followed by 26.96% cases had age between 66-70 years of age, 13.91% cases had age between 71-75 years of age, 9.57% cases had age between 76-80 years of age, 6.09% cases had more than 80

years.

Table 1: Gender

Gender	No of cases	Percentage
Male	63	54.78
Female	52	45.22

Table 2: Risk Factors

Risk factor	No of cases	Percentage
Hypertension	11	9.57%
Hyperthyroidism	4	3.48%
COPD	9	7.83%
DM	5	4.35%
IHD	16	13.91%
Multiple risk factors	61	53.04%
No risk factors	9	7.83%

Table 3: Habits

Habits	No of cases	Percentage
Smoking	25	21.74%
Alcohol	16	13.91%
Smoking + alcohol	13	11.30%
No any	61	53.04%

Table 4: Symptoms

Symptoms	No of cases	Percentage
Angina	6	5.52%
Palpitation	25	21.74%
Dyspnoea	1	0.87 %
Multiple symptoms	83	72.17%

Table 5: Complications

Complication	No of cases	Percentage
Heart failure	23	20.00
Embolic Phenomenon	2	1.74
Multiple complications	33	28.70
No complications	57	49.57

Table 6: Treatment

Treatment	No of cases	Percentage
Medical	95%	82.61
Cardioversion	5%	4.35
Medical + cardioversion	15%	13.04

Table 7: Outcome

Outcome of patient	No of cases	Percentage
Reverted	88	76.52
Sustained	27	23.48

Table 8: Final Status

Final status	No of cases	Percentage
Discharge	101	87.83
Death	14	12.17

DISCUSSION

In our study males were more in number than females. Out of 115 pts 63 (54.78%) were male and 52 (45.21%) were female. In study conducted by Krishnakumar S. et al. d1 males were 16% and females were 84%. Another study by Roby A, Manojan KK. Etiological and Clinical Profile of Atrial Fibrillation in Clinical Practice. Kerala Medical Journald4 Out of the 94 patients with AF, 58 (61.7%) were males and 36 (38.29%) were females. In our study maximum number of patients were in the 60-70 years age group, and more than 80 years only 7 patients were present. Study by Dhungel S, Laudari S. Clinical Profile of Atrial Fibrillation in a Tertiary Hospital their study showed That atrial fibrillation is common in the elderly people particular above 60 years.^[1] Roby A, Manojan KK. Etiological and Clinical Profile of Atrial Fibrillation in Clinical Practice. Kerala Medical Journal. 2019 Sep in their study majority of patients were between the ages of 50 – 59 years (30.85%)^[2]. In present study Palpitation was the most common symptoms observed in patients with atrial fibrillation which is in accordance to Krishnakumar S. et al.^[3] -Palpitation (52%), Manojan KK. et al^[2] Palpitation (30.85%) Laudari S. et al^[1] -Palpitation (56.5%). In present study 21.74% cases were seen having smoking habit, 13.91% cases were seen with alcohol consumption habit, 11.30% cases were seen with smoking and alcohol consumption habit. 53.04% cases were seen without any habit. As our study has most common cause to be ischemic heart disease whose one of major risk factor is smoking^[4], hence we have got smoking as the most common habit associated with atrial fibrillation. Similar result was found in other studies Study conducted by Alonso A et al 101, Witteman JC. et al^[5], Hong K et al^[6].

In present study 15.65% cases were seen without any complications. 48.70 % cases were seen with heart failure complication which is in accordance with Van Den Berg MP, Tuinenburg AE, Crijns HJ, Van Gelder IC, Gosselink AT. In our study, 82.61% cases had medical treatment, 4.35% cases had cardioversion treatment where 13.04% cases received medical + Cardioversion treatment both which is in accordance with Alpert MA. Medical cardioversion of atrial fibrillation. Chest.^[7] and Van Gelder IC, Crijns HJ, Tieleman RG, Brügemann J, De Kam PJ,^[8] Gosselink AM, Verheugt FW, Lie KI. Chronic atrial fibrillation: success of serial cardioversion therapy and safety of oral anticoagulation. Archives of internal medicine^[9].

CONCLUSION

1. The most common age group affected in our study was between 61-65 yrs.
2. In our study ischemic heart disease was found to be the most common cause of atrial fibrillation.
3. In present study majority of patients were associated with no habits followed by smoking.
4. In present study Palpitation was the most common symptoms observed in patients with atrial fibrillation.
5. In our study the most common complication of patients suffering from atrial fibrillation was heart failure.
6. Majority of the patients were given medical treatment.
7. Majority of the patients in atrial fibrillation were reverted.
8. The mortality of patients with atrial fibrillation in our study was less than 15%.

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