IF : 4.547 | IC Value 80.26 Volume-6, Issue-4, April - 2017 • ISSN No 2277 - 8160

Original Research Paper Cardiology

A CLINICAL STUDY OF AETIOLOGICAL FACTORS, AGE, GENDER AND COMPLICATIONS IN ATRIAL FIBRILLATION

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ABSTRACT It's a clinical study on etiology, clinical profile and complications of Atrial Fibrillation in 50 patients attending casualty, medicine department, ASRAM General Hospital

KEYWORDS : Atrial Fibrillation

INCLUSION CRITERIA:

1. Clinical features suggestive of irregularly irregular pulse.
2. Cases with definitive ECG findings suggestive of Atrial fibrillation

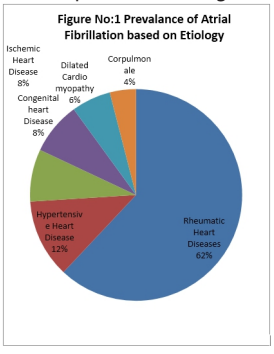
EXCLUSION CRITERIA:

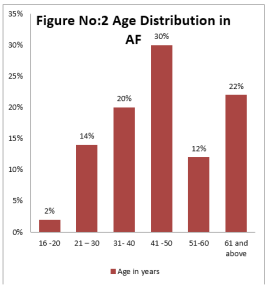
1. Patients with risk factors like smoking, alcohol, diabetes, chronic kidney disease, thyroid disorders
2. Patients with no features either clinical and or ECG findings

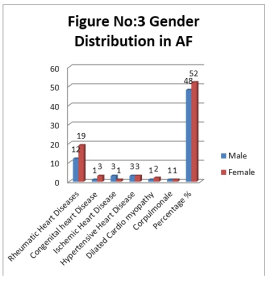
RESULTS

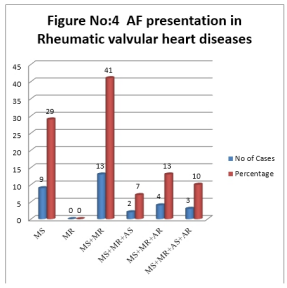
The studied patients have been analysed on etiological factors, age distribution, gender distribution, complications and types of rheumatic valvular heart diseases in Atrial Fibrillation.

The data has been compiled as following formats.









DISCUSSION

In the present study, 50 cases of atrial fibrillation on electr oca rdiogram were analysed for etiological factors, age, gender, valvular lesions in rheumatic heart disease and complications.

In the etiological analysis of 50 AF cases, the most common etiology was rheumatic heart disease, followed by hypertensive heart disease, ischemic heart disease, congenital heart disease, Dilated cardiomyopathy, Corpulmonale. When compared with other study groups, rheumatic heart diseases is the common cause for Atrial fibrillation in India and hypertension , coronary heart disease are the common cause in western world. R. arora, g. Subramanian M. Khaliullah and MG Gupta, in their study of 2500 cases of rheumatic heart disease 384 cases had atrial fibrillation. Among the AF cases the valvular lesion incident was MS 38%, MS + MR 30%. The present study shows combination of MS + MR (41%) was the most common lesion

According to American heart association the cross sectional studies have found low prevalence in those below the age of 65yrs and increasing to 8% in those older than 80 yrs. According to AG shaper, HSR Huts zfezfar when 2 series of patients with AF were analysed they found mean age of patients seen in Johannesburg study was 38 yrs, where as in London study it was 62 yrs. The mean prevalence of AF of 0.5% for the group aged 50-59 years and rises to 8.8% in the group aged 80-89 years. In our study, AF incidence is high in age group 41-50 yrs (30%). The next commonly affected age group is elderly people of 61yrs and above with 22% incidence.

In Kannel.WB, AbbotR.D, et. al study, The prevalence of AF increases with age slightly more common in men than women. The incidence of development of AF over 22yrs in Framingham study was 2.2% in men and 1.7 in women. In the present study, Out of 50 cases, the incidence in female is about 58% and incidence in male is about 42%.

In O.T. Samani and HB Chandalia study, congestive cardiac failure present in 64 % of cases with atrial fibrillation. Cabin HS, Club KS, Hall C, et.al reported cerebral embolism in 85% cases, peripheral embolism in 15% cases. In our study, the most common complication documented is heart failure (76%), LA thrombus 14%

and Cerebro vascular accident 10%.

CONCLUSION

The occurrence of atrial fibrillation was more common above the 40 years of age. AF was more common in females (58%). The incidence of AF in men increases with age. In the present study, the common aetiology of AF was Rheumatic heart disease 62% followed by Hypertensive heart disease 12 %, congenital heart disease (ASD) and Ischemic heart disease each carries 8%. In this 62% of rheumatic heart disease with atrial fibrillation, the mitral valve was involved in almost all the patients. The commonest clinical presentation was MS + MR, 41% incidence followed by isolated MS (29 %). The incidence of combined mitral and aortic valve lesion is 10%. The congenital heart disease (ASD) with AF was found in 8% of cases. The commonest complication in AF was heart failure, 32% incidence, followed by LA thrombus 14% and CVA with embolic stroke 10% of cases.

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