**Original article:**

**Association of etiological factors and atrial fibrillation: Cross sectional study**

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**Abstract:**

**Introduction:** Atrial fibrillation (AF) is the most commonly encountered arrhythmia in clinical practice.The present study was planned to study association between etiological factors and atrial fibrillation.

**Material and methods:** The present study was conducted at Government Medical College and Hospital, Aurangabad between January 2003 to August 2005. Patients of atrial fibrillation diagnosed on ECG were included in the study. All the patients underwent a chest X-ray and trans-thoracic echocardiographic (TTE) examination. Thyroid function tests were done if indicated. Ecology of AF was ascertained from the collected data.In 18 patients of AF transesophageal echocardiography (TEE) was done. 10 cases with severe MS underwent. LAA function and flow pattern studies. The LAA functions and the flow patients were also studied in 10 cases of severe MS in sinus rhythm.

**Results and conclusion:** The age of the patients in the present study ranged from 13 years to 76 years with a mean age of 43.17+ 15.62 years. The youngest patient was 14 years old and the oldest was 76 years old. Maximum number of patient i.e. 44 (29.33%) were from 31-40 years age group. In the present study of RHD was the most common etiology observed in AF (71.33%) followed by IHD (16.66%), Lone AF (2.66%). HT (2.00%), pericardial disease (2.00%), thyrotoxicosis (1.33%), cardiomyopathy (1.33%), congenital heart disease (1.33%), sick sinus syndrome (0.66%) and alcohol (0.66%) . Aberg (1969) in a retrospective review of 642 patients with AF found most common association with IHD (47.6%), RHD (14.8%) and hypertensive heart disease (13.2%). Miscellaneous causes included malignancy, infection, uremia and idiopathic etiologies.

**Keywords:** Atrial fibrillation, sick sinus syndrome