

Global Summit on **CARDIOLOGY AND CARDIAC SURGERY**

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**Association of atrial fibrillation with patient characteristics in postoperative coronary artery bypass grafting surgery****Hafiz Ali S Rajput***Manchester University NHS Foundation Trust, United Kingdom*

**Introduction:** Atrial fibrillation (AF) after coronary artery bypass grafting (CABG) is correlated with poor patient outcomes. The study evaluated the association of patients' clinical and sociodemographic characteristics with the incidence of atrial fibrillation, postoperatively.

**Methodology:** A longitudinal study was performed in the cardiology department of a tertiary care unit, Sindh, Pakistan between October 2019 and November 2020. All patients who underwent CABG surgery irrespective of gender aged 30 to 75 years were included in the study. Patients with a history of atrial fibrillation or severe left ventricular dysfunction were excluded from the study. The incidence of atrial fibrillation was determined by observing an irregular pattern on electrocardiography (ECG) with no definite P-wave and irregular R-R interval. The patients were monitored for seven postoperative days. The final outcome was measured on the seventh postoperative day.

**Results:** A total of 247 patients with a mean age of  $63.43 \pm 9.72$  were enrolled in the study. Out of the 247 patients, 9.7% developed new-onset atrial fibrillation, postoperatively. Age above 65 years was associated with the occurrence of AF but it was not statistically significant ( $p > 0.05$ ). Similarly, patients who developed AF were more likely to have a left ventricle ejection fraction (LVEF) of less than 35% than those without AF (66.67% vs 43.95%;  $p = 0.033$ ).

**Conclusion:** A high rate of AF was observed in the study. Older age and impaired ventricular function were significantly associated with atrial fibrillation. It is recommended that hospitals should devise guidelines and protocols for the prevention and management of atrial fibrillation in patients undergoing cardiothoracic surgeries in order to minimize patient mortality and improve patient outcomes.