

# **The Role of Statin Therapy in the Primary Prevention of Atrial Fibrillation after Coronary Artery bypass Grafting**

*Thesis*

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**Critical Care Medicine**

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بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

﴿يَرْفَعُ اللَّهُ الَّذِينَ آمَنُوا مِنْكُمْ وَالَّذِينَ أُوتُوا الْعِلْمَ دَرَجَاتٍ  
وَاللَّهُ بِمَا تَعْمَلُونَ خَبِيرٌ﴾

سورة المجادلة الايه ١١

صدق الله العظيم

## ABSTRACT

**Background:** Atrial fibrillation is the most common arrhythmic complication after coronary artery bypass graft. It may contribute to morbidity, high cost and prolonged hospital stay.

**Objective:** To determine the strength of evidence of preoperative statin therapy for prevention of atrial fibrillation after isolated coronary artery bypass graft.

**Methods:** A prospective analysis of fifty (50) patients admitted to the cardiothoracic (CTs) ICU at the National Heart Institute after isolated coronary artery bypass grafting. Data collected from physical examination, instrumental non invasive (ECG, ECHO), lab investigations of all included patients.

**Results:** New onset postoperative atrial fibrillation occurred in 6 (22.2%) of patients with statin use 7 days prior to CABG, in 12 (52.2%), of patients without statin use prior to CABG, by analysis, advanced age, hypertension, prolonged P wave duration, PR interval, low EF, postoperative M.I., revascularization to PDA were independently predictive to post operative AF.

**Conclusion:** Our study provides evidence that preoperative statin therapy is associated with a reduction in the incidence of new onset atrial fibrillation after CABG.

**Key words:** Atrial fibrillation, Post CABG arrhythmia, Statin.