Outcomes of patients with atrial fibrillation undergoing percutaneous coronary intervention: 7 years data from the Malaysian National Cardiovascular Disease Database Percutaneous Coronary Intervention (NCVD-PCI) registry

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Introduction
According to AF studies from 1990-2010, 12.5 million of individuals worldwide suffered AF globally. The prevalence and incidence are increasing with current data of AF globally in 2010 were close to 5 million. AF associated morbidity increases as well as the disease burden. For Asian populations, it is estimated that there will be 72 million AF patients by 2030. On the other hand, cardiovascular disease is a major leading cause of hospitalization and incapacity in the health care sector. Managing AF itself is challenging as there is high prevalence of comorbidities such as hypertension, diabetes, and other vascular diseases in AF patients. Many challenging factors in AF patients include the occurrence of stroke which explains the risk of AF patients to be at very high risk of mortality which will be difficult to judge in asymptomatic patients who may present with asymptomatic patients who underwent non-sustained therapy.

Aims
The study is limited data to prevalence of AF among patients with cardiovascular disease at Asian populations, the objective of the study is to analyze the prevalence and characteristics of patients with AF who underwent percutaneous coronary intervention (PCI) and to present the associated mortality to compare in the non- AF patients accessing to the Malaysian National Cardiovascular Disease Database Percutaneous Coronary Intervention (NCVD-PCI) registry (2005-2013).

Methods and results
Since the period of 7 years, from 2007 to 2013, a total of 10,371 patients underwent PCI according to the National Cardiovascular Disease Database Percutaneous Coronary Intervention (NCVD-PCI) registry, 217 (2.1%) patients were diagnosed as having atrial fibrillation at presentation and 10,154 (4.5%) were 75-79 years old. AF patients are more commonly with high prevalence of comorbidities. 60% of all AF patients are found to be on warfarin or anticoagulation. Prevalence data from systematic review is most widely performed (C107) outcome in studies to date with a 45-60% in AF patients. In comparing the ProAtrial of recurrent anticoagulation ischemic stroke incidence in non-AF patients, S22R compared to AF patients (S24R). Potential complications of AF include stroke and bleeding episodes and most common in AF patients as reported even though major bleeding didn't occur any differences among two groups. Major outcome was ischemic complications such as death in non-AF compared to AF patients and cardiac death is showing the same occurrence among AF population.

Conclusion
Among patients with undergoing PCI, presence of AF shows higher rate of procedural complications as well as cardiac death which may be due to associated factors. Conversely, death rate was associated with outcome in Asian patients.