

中文題目：成人先天性心臟病病患容易合併高心房顫動盛行率並造成梗塞性中風

英文題目：Adult congenital heart disease patients have high prevalence of atrial fibrillation and result in high risk of ischemic stroke outcome even in young age

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**Background** : Atrial fibrillation (AF) is an important risk factor for stroke. Traditionally, we use CHA<sub>2</sub>DS<sub>2</sub>-VASc score to assess whether patients need treatment with anticoagulant. The purpose of this study is to explore whether there is an association between AF and stroke in the group of adult congenital heart disease (CHD) population in Taiwan and whether CHA<sub>2</sub>DS<sub>2</sub>-VASc score is suitable to for this group of patients.

**Methods** : From 1997-2010, adult CHD population were retrospectively collected from registry for catastrophic illness patients (HV database) of Taiwan National Health Insurance Research Database(NHIRD). After excluding missing data and unconfirmed CHD type, we matched CHD patients according to the presence or absence of AF and stroke outcome was analyzed by SAS software. Subgroup study with age and anticoagulant therapy with warfarin were analyzed

**Results** : Overall, a total of 10547 with single diagnosis of ACHD patients were retrieved from the HV database. Compared to general population, ACHD patients have 4.7-15.3 times higher risk of atrial fibrillation prevalence. Among ACHD patients, patients with AF have a 2.16 times higher stroke event rate than those without AF ( $p<0.001$ ). This trend is more obvious among ACHD patients younger than 50 years old, up to 3.12 times ( $p<0.001$ ). In anticoagulant therapy, warfarin group has a trend to reduce the risk of stroke, even when those CHA<sub>2</sub>DS<sub>2</sub>-VASc score $<2$  although statistically insignificant.

**Conclusions** : During 13 years follow-up, ACHD population with AF increased life-long risk of stroke, especially in those younger

adult(<55-year-old). Anti-coagulant with warfarin may help to decrease stroke risk in ACHD patients, even in those low CHA<sub>2</sub>DS<sub>2</sub>-VASc score group.