中文題目:甲狀腺毒性併發之心房顫動造成缺血性中風之風險探討

英文題目: The risk of ischemic stroke in thyrotoxic atrial fibrillation

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服務單位:¹奇美醫院心臟內科^{,2}南台科技大學生物科技系^{,3}奇美醫院醫研部 **Background and Purpose--** Atrial fibrillation (AF), the most common cardiac complication of hyperthyroidism, is known to be involved in thromboembolic events. However, the incidence of stroke in thyrotoxic AF remains unclear. Herein, we aimed to investigate the risks of mortality and ischemic stroke between patients with thyrotoxic and non-thyrotoxic AF.

Methods-- From Taiwan's National Health Insurance Database between 2001 and 2010, after excluding patients with structure heart disease and hypercoagulable status, 1868 patients with the concomitant diagnoses of AF and hyperthyroidism were identified in the comparison of 7472 age, gender and comorbidities matched patients of non-thyrotoxic AF.

Results-- There was no significant difference of either CHA_2DS_2 -VASc score or the prescription of anti-coagulants between the studied groups. Instead more β -blocker/digoxin and more statin users in thyrotixic and non-thyrotixc AF patients respectively. Patients with thyrotoxic AF represented lower risks of all-cause mortality and ischemic stroke than those with non-thyrotoxic AF, especially in whose CHA_2DS_2 -VASc score ≥ 1 . Notably, co-morbidities including diabetes, hyperlipidemia, hypertension and coronary artery disease was noticed to contribute to all-cause mortality in patients with non-thyrotoxic AF but the effect diminished in in those with thyrotoxic AF. Among patients with thyrotoxic AF, though certain common risk factors such as old age and diabetes were associated with the risk of ischemic stroke, generally CHA_2DS_2 -VASc scoring failed to predict the development of stroke in a proportional manner.

Conclusions-- Compared with non-thyroxic AF, the presence of hyperthyroidism reduced the risk of all-cause of mortality and ischemic stroke. Also, different from non-thyroxic AF, CHA₂DS₂-VASc scoring may not be an ideal predictor of ischemic stroke in patients with thyroxic AF.



Figure. Cumulative survival curve stratified by hyperthyroidism, (A) All-cause

mortality, (B) Ischemic stroke and (C) Bleeding