Risk of Gastrointestinal bleeding in Chinese patients with non-valvular atrial fibrillation either maintained on a vitamin K antagonist or switched to a new oral anticoagulant (NOAC): a retrospective, matched-cohort study

Chan CK(1)
(1)Pharmacy Department, Tuen Mun Hospital, (2)Medicine and Geriatrics Special Out-patient Clinic (M&G SOPC), Tuen Mun Hospital

Keywords:
Gastrointestinal bleeding
Atrial fibrillation
Warfarin
Oral anticoagulant
Switcher
Dabigatran, Rivaroxaban

Introduction
Gastrointestinal bleeding (GIB) has long been a concern in patients with non-valvular atrial fibrillation (NVAF) when they were deciding to switch from warfarin to a new oral anticoagulants (NOAC) but limited safety data is available on the risk of GIB after switched especially in the local Chinese population. Therefore, this study aimed to compare the rate of GIB events in local Chinese patients with NVAF who either remained on warfarin or switched to dabigatran or rivaroxaban.

Objectives
To compare the rate of GIB events in local Chinese patients with NVAF who either remained on warfarin or switched to dabigatran or rivaroxaban.

Methodology
In this matched retrospective cohort study, subjects who were aged ≥18 years, of Chinese ethnicity, with NVAF, received a prescription of warfarin between Jan 1, 2010 and Dec 31, 2011 and followed up in the Medicine and Geriatrics Special Out-patient Clinic (M&G SOPC) of Tuen Mun Hospital were recruited to the study. The Hospital Authority (HA) Electronic Patient Record (EPR) database was used to extract data from the eligible subjects based on the exclusion criteria. Each switcher was matched with two non-switchers using five matching variables, including age, gender, history of ischemic stroke and systemic embolism, international normalized ratio (INR) and CHA2DS2-VASc Scores. Each patient was followed up for a median of 15 months. The primary outcome of this study was the incidence of GIB in switchers versus non-switchers.
Result
Among 1593 screened patients, 111 eligible subjects were identified in which 37 were switchers from warfarin to NOAC and 74 were non-switchers remained on warfarin. The subjects had a median age of 76 (IQR 52-87) and 57 (51%) were male. Their median CHA2DS2-VASc score was 3 (IQR 2-4). After a median follow-up period of 15 months, no significant difference in the risk of GIB between the groups (switchers (1 [3%]) versus non-switchers (3 [4%]), p=0.722) was noted.