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## Risk of new-onset atrial fibrillation among heart, kidney and liver transplant recipients: where are we and where are we going?

## **WEI SYUN HU**

Department of CARDIOLOGY, CMUH, Taiwan

**Objectives:** The objective of the study was to explore the incidence of atrial fibrillation (AF) in various populations of patients with organ transplantation (OT).

**Methods:** We used a large national data set from Taiwan to investigate the incidence of AF after OT. Frequency matching method used to match controls: OT patients were 4:1. Kaplan-Meier analyses with the use of the Aalen-Johansen estimator was employed for estimating the cumulative incidences of new-onset AF. The Fine-Gray competing risks model was also employed to analyze the risk of AF for the OT cohort compared with the non-OT cohort. 6955 OT patients and 27,820 controls were included in this study.

**Results:** OT did lead to a 3.09-fold risk for AF [95% confidence interval (CI) = 2.07-4.62], especially in the subgroup of female gender [adjusted subhazard ratio (aSHR) = 6.66, 95% CI = 3.85-11.5], age  $\leq$  49 years (aSHR = 8.19, 95% CI = 3.99-16.8) and without comorbidity (aSHR = 4.61, 95% CI = 2.71-7.87). Moreover, liver recipients tended to be more likely to develop new-onset AF among those OT patients (aSHR = 4.07, 95% CI = 2.63-6.30) as compared to the controls.

**Conclusions:** This study demonstrates an increased incidence of AF after OT. Heightened awareness and clinician vigilance are warranted to facilitate early diagnosis and improved outcomes.