

Abstract 190 Figure 1 Study flowchart. Flowchart summarising participants that were excluded or lost to follow-up, and how the final study sample was derived. SDNN =standard deviation of normal-to-normal beats.

CI 0.06,0.19; $p < 0.001$; HF power; beta 8.04; CI 2.3,13.8; $p = 0.006$; LF power beta 9.86; CI 4.7,17.0; $p < 0.012$; total PSD beta 25.40; CI 8.8,43.4; $p = 0.008$.

Conclusion Carotid arterial stiffness in older age is associated with reduced HRV independent of early carotid atherosclerosis (cIMT), hypertension or stroke, potentially through an impaired baroreceptor response. As loss of carotid distensibility can be prevented and loss of HRV predicts cardiovascular mortality, public health policies should implement more and earlier cardiovascular health interventions to maintain carotid distensibility, with HRV as a marker of disease progression.

Conflict of Interest None

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ASSOCIATIONS OF NON-ALCOHOLIC FATTY LIVER DISEASE WITH SUBCLINICAL ATHEROSCLEROSIS AND ECHOCARDIOGRAPHY MEASUREMENTS IN YOUNG ADULTS

¹Rosalind Tang, ¹Kushala Abeysekera, ¹Laura Howe, ²Alun Hughes, ¹Abigail Fraser.
¹University of Bristol, Bristol, UK; ²Imperial College London

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Background Non-alcoholic fatty liver disease (NAFLD) is becoming increasingly prevalent worldwide, even among young adults. This condition shares many risk factors with other metabolic disorders, including cardiovascular disease (CVD), but researchers suggest the presence of NAFLD itself may be a risk factor for developing CVD, independently of other established factors.

Methods In this prospective, general population-based cohort study of young adults in the UK, transient elastography-defined liver steatosis and fibrosis were assessed at age 24

years, as were cardiovascular structure and function, measured using echocardiography, carotid ultrasonography and pulse wave analysis. We examined associations between liver and cardiovascular health, with and without accounting for age, sex, ethnicity, social class, employment, body mass index, alcohol, smoking, blood pressure, fasting serum lipids, fasting glucose, fasting insulin and C-reactive protein. All participants with harmful alcohol consumption or viral hepatitis were excluded from analysis. Pregnant participants were also excluded from ultrasonography and therefore could not be included.

Results A total of 2,047 young adults (mean age 24.4 years; 36.2% female) from the Avon Longitudinal Study of Parents and Children (ALSPAC) were included; 406 (19.8%) had liver steatosis, while 38 (1.9%) had liver fibrosis F2 or greater. After full-adjustment for established cardiovascular risk factors, steatosis was only associated with a decrease in stroke volume index (adjusted mean difference [95% CI] of -1.21 [-2.14, -0.10] mL/m²). All other associations of steatosis with cardiovascular outcomes were null in our fully-adjusted model. Liver fibrosis, however, was associated with several measures of cardiac structure and function, as well as subclinical atherosclerosis. Compared to F0/F1 fibrosis without septa, presence of F2-F4 fibrosis was associated with lower cardiac output index (adjusted mean difference [95% CI] of -0.22 [-0.39, -0.05] L/min/m²) and with greater tricuspid annular plane systolic excursion (adjusted mean difference [95% CI] of 0.13 [0.01, 0.25] cm), left ventricular mass index (adjusted mean difference [95% CI] of 2.02 [0.06, 3.99] g/m^{2.7}), mitral valve E/A ratio (adjusted mean difference [95% CI] of 0.30 [0.12, 0.48]), carotid intima-media thickness (adjusted mean difference [95% CI] of 0.02 [0.01, 0.04] mm) and carotid-femoral pulse wave velocity (adjusted mean difference [95% CI] of 0.42 [0.08, 0.76] m/s) after full-adjustment for covariates.

Conclusions Liver fibrosis, but not steatosis, was associated with more adverse cardiovascular health in young adults once known confounders such as adiposity were accounted for. Further follow up of this and similar cohorts will be important to determine whether cardiovascular health worsens over time in those with steatosis alone, once accounting for other cardiovascular risk factors.

Conflict of Interest None

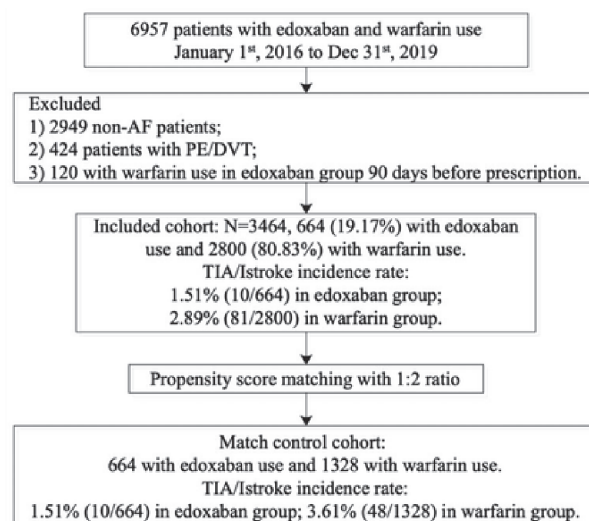
192 ABSTRACT WITHDRAWN

193 EDOXABAN VERSUS WARFARIN ON STROKE RISK IN PATIENTS WITH ATRIAL FIBRILLATION: A TERRITORY-WIDE COHORT STUDY

¹Che Him Dicken Kong, ²Jiandong Zhou, ³Sharen Lee, ⁴Keith Sai Kit Leung, ⁵Tong Liu, ⁶Abhishek C Sawant, ⁷John Corbelli, ⁸Abraham KC Wai, ⁹Carlin Chang, ²Qingpeng Zhang, ⁵Gary Tse. ¹Li Ka Shing Institute of Health Sciences and Chinese University Research Institute, Hong Kong, China; ²School of Data Science, City University of Hong Kong; ³Cardiovascular Analytics Group, Laboratory of Cardiovascular Physiology, Hong Kong; ⁴Aston Medical School; ⁵Tianjin Institute of Cardiology, Second Hospital of Tianjin Medical University; ⁶Banner University Medical Center; ⁷Buffalo VA Medical Center; ⁸The University of Hong Kong; ⁹Queen Mary Hospital

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Background In this territory-wide, observational, propensity score-matched cohort study, we evaluate the development of transient ischaemic attack and ischaemic stroke (TIA/Ischaemic stroke) in patients with AF treated with edoxaban or warfarin. **Methods** This was an observational, territory-wide cohort study of patients between January 1st, 2016 and December 31st, 2019, in Hong Kong. The inclusion were patients with i) atrial fibrillation, and ii) edoxaban or warfarin prescription. 1:2 propensity score matching was performed between edoxaban and warfarin users. Univariate Cox regression identifies significant risk predictors of the primary, secondary and safety outcomes. Hazard ratios (HRs) with corresponding 95% confidence interval [CI] and p values were reported. **Results** This cohort included 3464 patients (54.18% males, median baseline age: 72 years old, IQR: 63-80, max: 100 years old), 664 (19.17%) with edoxaban use and 2800 (80.83%) with warfarin use. (Figure 1). After a median follow-up of 606 days (IQR: 306-1044, max: 1520 days), 91 (incidence rate: 2.62%) developed TIA/ischaemic stroke: 1.51% (10/664) in the edoxaban group and 2.89% (81/2800) in the warfarin group. Edoxaban was associated with a lower risk of TIA or ischemic stroke when compared to warfarin (figure 2).



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