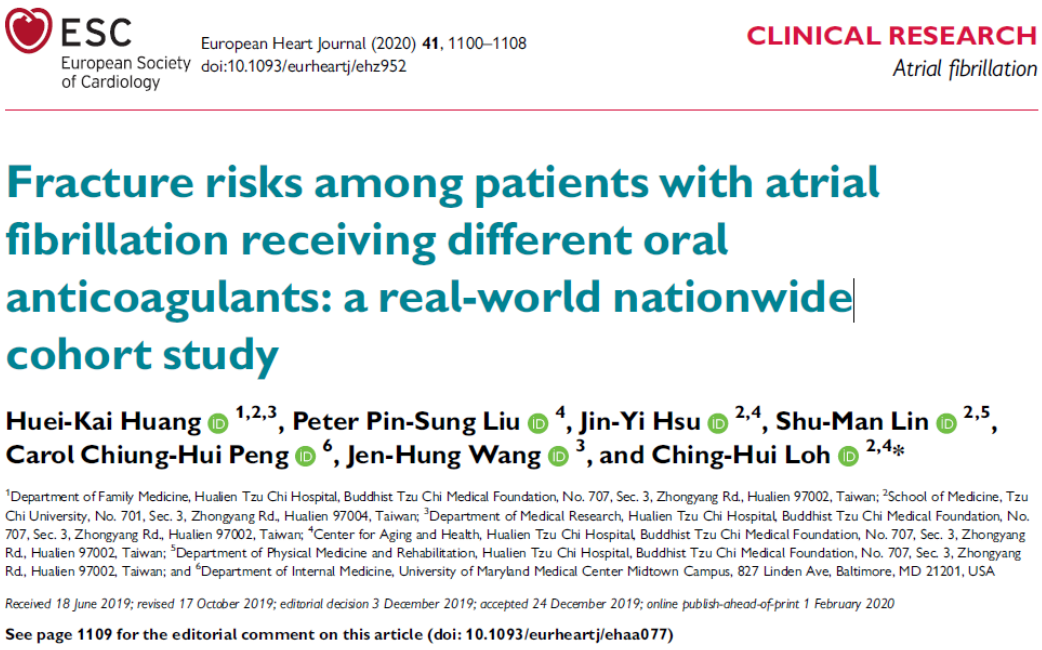
Fracture risks among patients with atrial fibrillation receiving different oral anticoagulants: a real-world nationwide cohort study

Huei-Kai Huang(黃暉凱,家庭醫學部), Peter Pin-Sung Liu(劉品崧,高齡暨社區醫學部), Jin-Yi Hsu(許晉譯,高齡暨社區醫學部), Shu-Man Lin(林書蔓,復健醫學部), Carol Chiung-Hui Peng, Jen-Hung Wang(王仁宏,研究部), and Ching-Hui Loh(羅慶徽,高齡暨社區醫學部)*



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CLINICAL RESEARCH
Atrial fibrillation

Fracture risks among patients with atrial fibrillation receiving different oral anticoagulants: a real-world nationwide cohort study

Huei-Kai Huang [1,2,3], Peter Pin-Sung Liu [4], Jin-Yi Hsu [2,4], Shu-Man Lin [2,5], Carol Chiung-Hui Peng [6], Jen-Hung Wang [3], and Ching-Hui Loh [2,4]*

[1]Department of Family Medicine, Hualien Tzu Chi Hospital, Buddhist Tzu Chi Medical Foundation, No. 707, Sec. 3, Zhongyang Rd., Hualien 97002, Taiwan; [2]School of Medicine, Tzu Chi University, No. 701, Sec. 3, Zhongyang Rd., Hualien 97004, Taiwan; [3]Department of Medical Research, Hualien Tzu Chi Hospital, Buddhist Tzu Chi Medical Foundation, No. 707, Sec. 3, Zhongyang Rd., Hualien 97002, Taiwan; [4]Center for Aging and Health, Hualien Tzu Chi Hospital, Buddhist Tzu Chi Medical Foundation, No. 707, Sec. 3, Zhongyang Rd., Hualien 97002, Taiwan; [5]Department of Physical Medicine and Rehabilitation, Hualien Tzu Chi Hospital, Buddhist Tzu Chi Medical Foundation, No. 707, Sec. 3, Zhongyang Rd., Hualien 97002, Taiwan; and [6]Department of Internal Medicine, University of Maryland Medical Center Midtown Campus, 827 Linden Ave, Baltimore, MD 21201, USA

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研究目的:

比較傳統口服抗凝血劑(warfarin)和新型口服抗凝血劑(NOAC)，在心房顫動病患中，對於骨折風險之影響。

研究方法與結果:

使用台灣全人口健保資料庫，納入 2012-2016 年新發生的心房顫動病患，依照使用口服抗凝血劑的種類，分為 NOAC 和 warfarin 族群。NOAC 族群再依照使用之藥物分為 dabigatran, rivaroxaban, apixaban 三個子族群。分析後發現與傳統的 warfarin 相比，NOAC 類新型藥物

有較低的骨折風險，校正後風險比例 hazard ratio (HR) = 0.84 (95% confidence interval = 0.77–0.93; P< 0.001)。次族群分析中發現三種 NOACs (dabigatran, rivaroxaban, apixaban)相較於 warfarin，皆有較低的骨折風險。執行多種敏感性分析後，也皆得到相同的分析結果。

結論:

與傳統的 warfarin 相比，使用新型口服抗凝血劑 NOAC，在心房顫動病患，有較低的骨折風險。因此若心房顫動經評估後需使用口服抗凝血劑治療，使用 NOAC 被認為能降低骨折風險。然而，未來仍需要進一步研究，來探索背後的病生理及藥理機轉，並釐清因果關係是否存在。

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本研究刊登後，European Heart Journal 期刊特別針對此研究發現，刊登 EDITORIAL 討論該議題，詳見: https://doi.org/10.1093/eurheartj/ehaa077

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EDITORIAL

Vitamin K antagonists and osteoporotic fractures: insights from comparisons with the NOACs

Raffaele De Caterina [1]*, Santa Mundi[2], and Maria Fusaro[3]

[1]Department of Surgical, Medical, Molecular Pathology and Critical Care Medicine, University of Pisa, Pisa; and Fondazione VillaSerena per la Ricerca, Città Sant'Angelo, Pescara, Italy; [2]National Research Council (CNR) Institute of Clinical Physiology, Lecce, Italy and Dipartimento di Scienze e Tecnologie Biologiche ed Ambientali (DiSTeBA), University of Salento, Lecce, Italy; and [3]CNR Institute of Clinical Physiology (IFC), Pisa, Italy and Dipartimento di Medicina, University of Padova, Italy

This editorial refers to 'Fracture risks among patients with atrial fibrillation receiving different oral anticoagulants: a real-world nationwide cohort study', by H.-K. Huang *et al.*, doi:10.1093/eurheartj/ehz952.

namely prothrombin (factor II), factor (F) VII, IX, X; and the anti-coagulant proteins C, S, and Z. Inhibition of FII, VII, IX and X accounts for the anticoagulant action of VKAs.

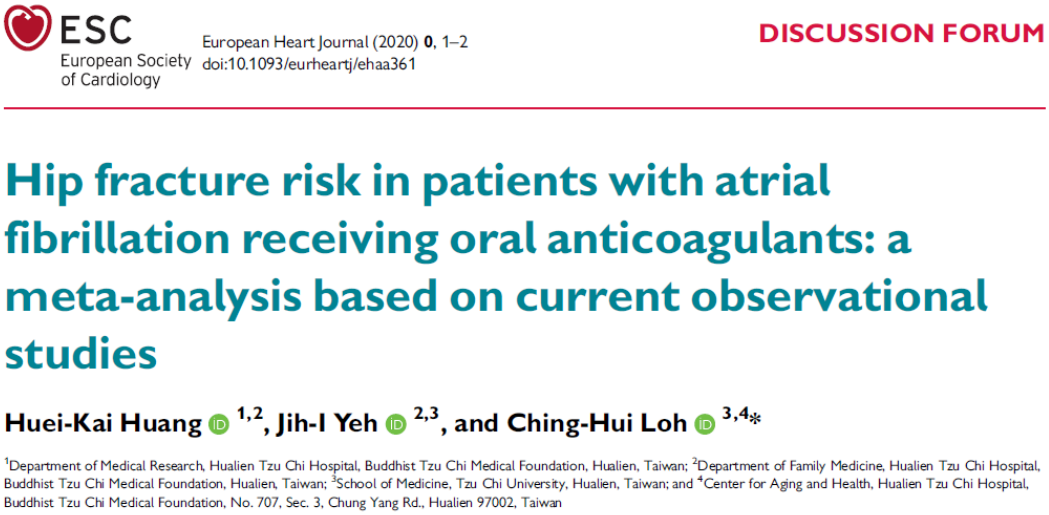
In addition to being the cofactor of coagulation factors, vitamin K is also, however, the cofactor of other proteins discovered much later,

European Heart Journal 主編 Dr. Luscher 並於其發表的短文 Challenges in atrial fibrillation: detection, alert systems, fibrosis, and infection 中，描述我們團隊的研究發現

詳見: https://doi.org/10.1093/eurheartj/ehaa153

隨後因有讀者投書 European Heart Journal 的 DISCUSSION FORUM，針對髖骨骨折的分析結果及相關研究做討論。我們團隊亦被邀請加入討論，並根據目前現有證據，進一步針對髖骨骨折執行統合分析，並將統合分析結果以短文 DISCUSSION FORUM 的方式，再刊登於 European Heart Journal。

詳見: https://doi.org/10.1093/eurheartj/ehaa361



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DISCUSSION FORUM

Hip fracture risk in patients with atrial fibrillation receiving oral anticoagulants: a meta-analysis based on current observational studies

Huei-Kai Huang [1,2], Jih-I Yeh [2,3], and Ching-Hui Loh [3,4]*

[1]Department of Medical Research, Hualien Tzu Chi Hospital, Buddhist Tzu Chi Medical Foundation, Hualien, Taiwan; [2]Department of Family Medicine, Hualien Tzu Chi Hospital, Buddhist Tzu Chi Medical Foundation, Hualien, Taiwan; [3]School of Medicine, Tzu Chi University, Hualien, Taiwan; and [4]Center for Aging and Health, Hualien Tzu Chi Hospital, Buddhist Tzu Chi Medical Foundation, No. 707, Sec. 3, Chung Yang Rd., Hualien 97002, Taiwan