The Utilization of Warfarin Dosing Algorithms in China: An Electronic Survey Study

Yaxin Liu

Central South University Xiangya School of Pharmaceutical Science

Tian Wu

Central South University Third Xiangya Hospital

Yun Kuang

Central South University Third Xiangya Hospital

Xiaoyi Ning

Central South University ,the third Xiangya hospital

Jinlian Xie

Central South University, the third Xiangya hospital

Chengxian Guo

Central South University Third Xiangya Hospital

Yuxia Xiang

Central South University Third Xiangya Hospital

Weihong Jiang

Central South University Third Xiangya Hospital Department of Cardiology

Guoping Yang (✉ ygp9880@126.com)

XiangYa School of Pharmaceutical Sciences, Central South University, Changsha, Hunan, 410013, China

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Research

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Abstract

Background: Warfarin, a key anticoagulant medication, has a narrow therapeutic window and individual difference. Many warfarin dosing algorithms have been developed and been proved to have clinical benefits. However, the utilization of algorithms by medical professionals in China was unknown. We conducted an online survey to investigate the use and requirements of warfarin dosing algorithms among Chinese medical professionals.

Method: A questionnaire survey was conducted via WeChat to investigate the utilization of warfarin dosing algorithms by medical professionals in seven regions of China. The content of questionnaire was included general characteristics of participants, condition of anticoagulant therapy, utilization of warfarin dosing algorithms and demand for function of an assistant warfarin dosing system we proposed.

Results: A total of 399 participants completed the survey. Although most medical professionals use warfarin for anticoagulant therapy, some of them (15.04%) were not familiar with warfarin's individual difference. As high as 32.97% of clinicians ruled out genotypes when using warfarin. The vast majority of anticoagulant medical professionals believed warfarin dosing algorithms can have clinical benefits, but only 20.80% of them usually use algorithms for anticoagulant therapy.

Conclusion: Warfarin dosing algorithms have high evaluation while not good utilization among Chinese anticoagulant medical professionals. If warfarin dosing algorithms and assistant tools aimed to Chinese population were developed, to some extent can improve anticoagulant therapy in China.

Full Text

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Figures

Figure 1

A Knowledges of individual variance on warfarin B Genotypic considerations when using warfarin

Figure 2

Demand for assistant warfarin medication systems

Supplementary Files

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- [Questionnaire.pdf](#)