

SAFE AND ACCURATE WARFARIN REGIME FOR ASIAN PATIENTS OF VENOUS THROMBOEMBOLISM – A PROSPECTIVE STUDY

V-M Chadachan¹, P Handa¹, J-C Tay¹, , A-A Sule¹, H-H Teong¹, Y-M Wong²

Department of ¹General Medicine, ²Pharmacy,

Tan Tock Seng Hospital, Singapore

BACKGROUND: The benefits of warfarin therapy are very unpredictable because of complex pharmacokinetics and pharmacodynamics. Excessive anticoagulation may predispose to bleeding, whereas prolonged subtherapeutic anticoagulation predisposes to thrombosis and often mandates extended therapy with expensive parenteral anticoagulants and extended hospital stay. This need to minimize time required to achieve therapeutic INR, without causing overanticoagulation, has led to testing of various regimes for initiation of warfarin. This study aims to evaluate the accuracy and safety of a warfarin regime, and predict daily maintenance dosage in Asian population.

METHODS : A prospective analysis of patients with venous thromboembolism is being conducted by the In-patient Anticoagulation Services Team, Tan Tock Seng Hospital, Singapore since 1 April 2006. All patients are simultaneously started on subcutaneous fraxiparin and warfarin as per protocol. International normalized ratio (INR) is checked at baseline, on Day 3, and then daily until a stable therapeutic INR is achieved.

RESULTS: Among 27 patients included in the study, the average warfarin maintenance dose was 4.1mg. It was higher among Indian patients (6.25mg) than in Malayan (3.58mg) and Chinese (3.5mg) patients. Mean time required to achieve target INR was 5.5 days. Target INR was achieved in 22 patients within 7 days of starting warfarin therapy. The INR on Day 4 was accurate in predicting daily maintenance dose. No bleeding complications were reported during the initiation phase.

CONCLUSIONS: Our warfarin initiation regime appears simple, safe and accurate in predicting daily maintenance warfarin dose in Asian patients with venous thromboembolism. Mean time needed to achieve therapeutic INR was less than 7days in more than 80% of patients.

Keywords: Warfarin, Venousthromboembolism, Regime