Determination of warfarin dose requirement in thrombotic and embolic disorders in Iran

Zohreh Sanaat¹, Hamid Tayyebi Khosroshahi², Mehdi Farhoudi³, Javad Keyani⁴, Farhad Khosbin⁵, Majid Tayyebi Khosroshahi⁶

¹Hematology and Oncology, Hematology and Oncology Research Center, Tabriz University of Medical Sciences, Iran, ²Department of Nehrology, Tabriz University of Medical Sciences, ³Department of Norology, Tabriz University of Medical Sciences, ⁴Medicine Faculty, Tabriz University, ⁵Department of Nehrology, Hamedan University of Medical Sciences, ⁶Labrotorist, Loghman Hospital, Tehran

Objectives
Warfarin is one of the most commonly used drugs in the treatment and prevention of thrombotic and embolic disorders. One of the most important side effect of warfarin is bleeding that has closed association with its dosage. As this is affected by multiple factors such as genetic, racial background, other drugs, background illness, age, sex …We decided to study dose requirement of warfarin in Iranian patients.

Methods
In this study 150 patients from several part of Iran with thrombotic or embolic events were selected and after consideration of including and excluding criteria, they enrolled in study and received warfarin. We recorded their PT and INR regularly until their INR reached 2-3. And after three INR between 2-3 we recorded their warfarin dose. Body weight, height and BMI, sex, drugs and their background illness were recorded.

Results
A total of 150 patients were studied (75 male, 75 female). Mean warfarin dose was 4.11±1.52 mg. Mean warfarin dose for men was 4.29±1.49 mg and for women was 3.94±1.55 mg. The mean age of patients was 49.99±15.36 year. The mean BMI was 24.43±4.34. There was no association between dose of warfarin, age and sex. On the other hand no association between BMI and dose of warfarin.

Conclusion
With considering the results of this study we conclude that BMI and sex have no effect on warfarin dosage and that anticoagulation with warfarin in Iranian patients should be started with lower doses and its increments should be caution.

Key Words: warfarin, thrombotic and embolic events, PT