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EVALUATION OF PATIENT'S UNDERSTANDING AND COMPLIANCE ON WARFARIN THERAPY IN TENGKU AMPUAN RAHIMAH HOSPITAL (HTAR), KLANG

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ABSTRACT

Warfarin, the most common oral anticoagulant is used for a variety of indications, both therapeutic (e.g., treating deep venous thrombosis, maintaining bypass graft patency) and prophylactic (e.g., preventing stroke in atrial fibrillation). Warfarin act by inhibiting the function of vitamin K in blood clotting process. The most important side effect of warfarin is the occurrence of bleeding. Warfarin is a narrow therapeutic index drug having a propensity for many drug–drug interactions which require scrupulous monitoring to ensure that the international normalized ratio (INR) is within therapeutic range. Thus patient's understanding and compliance on warfarin therapy are essential in order to minimizes complication and achieved effective warfarin therapy. The objectives of this study are to assess patient's understanding and compliance to warfarin therapy. Questionnaire on patient's understanding and compliance was administered to randomly selected patients who were waiting for their medicine supply at the Outpatient Department Specialist Clinic Pharmacy Tengku Ampuan Rahimah Hospital, Klang through verbal query. All data on demographic particular of patients, evaluation of patient's understanding and evaluation of patient's compliance were presented as frequency and percentages. Finally, level of understanding and compliance among patients were identified. In the study 67 patients was used as samples, 35 patients (52.2%) were female and 32 patients (47.8%) were male with the highest frequency age of 41 to 60 years (46.3%). In this study, it was found that the more counseling session patients received, their knowledge about warfarin have increased and their understanding get improved (P=0.021). In this study, many patients (n=63, 94%) found to be comply with their warfarin therapy, however the stability of INR value among these patients (n=35, 52.2%) are not stable. It is found that patients comply with their warfarin therapy if they have better knowledge and good understanding about the therapy. Effective counseling should be provided to patients in order to increase their understanding and close monitoring should be done in order to ensure patients have less complication and eventually will lead to effective warfarin therapy.

CHAPTER 1

INTRODUCTION

1.1 Background of the Study

Warfarin, the most common oral anticoagulant is used for a variety of indications, both therapeutic (e.g., treating deep venous thrombosis, maintaining bypass graft patency) and prophylactic (e.g., preventing stroke in atrial fibrillation) [1]. Warfarin exerts its action by inhibiting Vitamin K epoxide reductase, reducing the amount of Vitamin K available to synthesizes the Vitamin K-dependent clotting factors (factors II, VII, IX and X) [2] and anticoagulant proteins (proteins C, S and Z) causing reduced plasma concentration of activated vitamin K-dependent proteins [4]. In patients with intact gastrointestinal tract, warfarin absorption is essentially 100%. After an oral dose, warfarin levels reach peak plasma levels within 2 hours. Absorption is decreased with certain drugs (e.g. cholestyramine), or in patients with hepato-biliary disease. Warfarin is 99% protein bound (mostly to albumin). Metabolism of warfarin is by cytochrome P450, but warfarin is a racemic mixture of two isomers, an S- and R-form, each with specific routes of metabolism within the hepatocyte S-warfarin is biologically 3-5 times more potent than the R-form [3].