To Monitor and Study the Effiency of Oral Anticoagulants in Patients of Deep Vein Thrombosis

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Background

Deep Vein Thrombosis (DVT), a kind of Venous Thromboembolism (VTE), is a potentially fatal disease causing significant morbidity, mortality and expenditure. Treatment aims at preventing the thrombus extension and pulmonary embolism (PE) and decrease the incidence of recurrent VTE and post-phlebitic syndrome (PPS). Many lines of treatment were tried, however now its dealt with heparin for a week overlapping with Oral Anticoagulants (OACs) and once effects of these are established OACs are continued for 3-6 months with International Normalised Ratio (INR) monitoring. INR is roughly the ratio of the patient prothrombin time to the mean normal prothrombin time. The recommended INR for prophylaxis and treatment of thrombotic disease is 2-3. Resistance to warfarin has been described as the inability to prolong the prothrombin time or raise the INR into the therapeutic range (TTR) when the drug is given at normally prescribed doses. Warfarin resistance is very difficult to determine because it varies within a population depending on individual dietary habits, metabolic status let alone the genetic makeup. Warfarin failure is also reported, defined as a new thrombotic event despite a therapeutic prothrombin time and INR. Moreover, warfarin differs from most other drugs in that the dosage required to achieve a desired therapeutic effect varies greatly among individuals, hence many patients are also unable to achieve or maintain the target desired INR.

Aims & Objectives

1. To study the incidence of fresh thrombosis and bleeding in patients on OACs.
2. To determine the baseline incidence of Coumadin resistance and Coumadin over anticoagulation in patients on OACs.
3. To study the modifiable factors associated with Coumadin resistance and over anticoagulation in patients on OACs.

Material & Methods

It was proposed to follow up 30 patients attending Haematology OPD of a tertiary care centre who are kept on OAC treatment at least once a month. On each follow up efficacy of OAC in prevention of thromboembolic episodes and adverse events in form of bleeding would be studied in details and recorded.

Inclusion criteria
All patients on OACs would be included in the study.

Exclusion criteria
Patients with chronic kidney disease or chronic liver disease.

Results

Yet to be tabulated; to be presented at the conference.

Conclusions

DVT is a very common disease seen in all age groups, and is associated with significant morbidity and mortality not only due to its thrombotic effects but also due to complications caused from use of OACs, hence a need to carry out a study which will try to elucidate the factors affecting safety and efficacy of OACs. We will be assessing the patients showing warfarin resistance or warfarin sensitivity and thus analyse the rationale of use of OACs as gold standard. Attempt will be done to pinpoint the cause of occurrence and precipitation of thrombotic episode in each case.