ABSTRACT

BACKGROUND: Venous Thromboembolism (VTE) is a significant cause of morbidity and mortality in surgical patients and one of the important preventable causes of in-patient mortality. It has been reported that the risk of post-operative DVT may have been underestimated. Numerous studies have quoted data regarding the incidence of DVT in the Western population. There is a common presumption that DVT is not so frequent in the Asian population, particularly the Indian subgroup. However, recent Indian studies have shown that the incidence of DVT in Indian population is not as uncommon as thought before.

AIM: To determine the incidence, morbidity and mortality due to Deep Venous Thrombosis in surgical patients, and to assess the validity and reliability of Adapted Caprini scoring in risk stratification for DVT prophylaxis.

METHODOLOGY: This was a prospective observational study in a Government Rajaji Hospital, Madurai on patients who underwent elective surgeries over a period of 12 months. An Adapted Caprini score was devised which included only the clinical criteria. The patients were scored by two persons independently at admission and followed up till the 30th post-operative day and primary and secondary end points were statistically analyzed.
RESULTS: Three hundred and two patients were included and the overall incidence of DVT at 30 days was 4.3%. The risk of developing DVT was found to be significantly higher among the >7 score group as compared to 3-4 group or the 5-6 group. Patients with a score of >7 were more likely to develop DVT as compared to 3-4 group or the 5-6 group.

CONCLUSION: The risk of developing DVT is less significant in the 5-6 score group compared to 7 or more score group. Further stratification of the highest risk groups is recommended to provide appropriate prophylaxis only to the patients with high scores, thereby reducing complications due to DVT prophylaxis.

KEYWORDS: Risk assessment model

Thromboembolism prophylaxis

Risk stratification

Deep venous thrombosis