

ORIGINAL ARTICLE

Deep Vein Thrombosis despite Receiving Anticoagulant Prophylaxis; a Cross-sectional Study

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Abstract

Introduction: Contradicting statistics exist regarding the prevalence of deep vein thrombosis (DVT) following lower limb trauma despite administration of anti-thrombotic agents. The present study aimed to evaluate the prevalence of DVT in patients with lower limb trauma despite receiving anticoagulant prophylaxis. **Methods:** The present cross-sectional study was carried out to evaluate the prevalence of traumatic lower limbs DVT despite anti-thrombotic therapy, in patients presenting to emergency department. Patients over 18 years old with traumas in the areas lower than knees in need for fixation with cast or splint for > 2 weeks were enrolled. Data were analyzed using SPSS version 21 and descriptive statistics. **Results:** 130 patients with the mean age of 40.05 ± 18.5 (15-92) were studied (61.5% male). 18 (13.8%) cases had history of drug abuse, 1 (0.8%) had diabetes mellitus, 8 (6.2%) had hypertension, 1 (0.8%) had asthma, and 1 (0.8%) had history of cranial vascular thrombosis. Mechanism of trauma was falling down in 44 (33.8%) cases, road traffic collisions in 50 (38.5%), and direct trauma in 36 (27.7%). 3 (2.3%) patients developed DVT despite receiving prophylactic anti-thrombotic agents. The mean time interval between discharge and development of DVT was 6 ± 3.6 days. **Conclusion:** Based on the results of the present study, the prevalence of DVT, despite receiving anti-thrombotic agents, in patients with lower limb trauma in need for fixation for > 2 weeks was 2.3%. All three cases of DVT in this study were developed in the first 2 weeks of fixation.

Keywords: Venous thrombosis; bone fracture; fixation; anti-thrombosis; thromboembolism; prevalence
