

**Background:** Deep Vein Thrombosis is a major complication occurs frequently postoperative especially after major orthopedic surgeries of the lower extremities. Anticoagulant therapy or intermittent pneumatic compression (IPC) in the early postoperative period can be useful in prevention or treatment of this problem.

**Objectives:** The aims of this study were to find the incidence of DVT cases in patients who had orthopedic surgeries especially in lower extremities and to assess the appropriateness of DVT prophylaxis used.

**Methods:** This was a retrospective study that was conducted in major inpatient departments for orthopedic patients in Palestine; Rafidia hospital / Nablus and Hebron Governmental Hospital (Aliah) / Hebron. Patient's medical records were reviewed and the data collection form was filled. The results were analyzed using Statistical Package for social sciences (SPSS) program.

**Results:** The study included 400 patients. The average age ( $\pm$  SD) of the patients was  $45.22 \pm 26.95$  years; ranging from 3 months to 97 years. Around half of the patients were males 213(53.25%). Most of them had medical insurance 367(91.75%) and 229(57.25%) were from villages. Five patients out of 400 developed DVT during their hospital stay, this gives an incidence of 1.3%, most of them had hip surgery. The most commonly used medication was enoxaparin 40 mg (74.3%), other anticoagulants and antiplatelets were heparin, warfarin, aspirin and clopidogrel.

**Conclusion:** The incidence of VTE among orthopedic patients in this study was close to other studies. Many patients were prescribed medical prophylaxis for VTE during their stay and the most commonly used agent was enoxaparin. However, the doses for some patients might not be in agreement with the guidelines.