

Summary:**Introduction:**

Heparin and Enoxaparin are important anti-coagulants, especially when we need quick interference of an anti-coagulant. The most important side effect of anti-coagulants is high risk of bleeding. Other side effects are alopecia, allergy, osteoporosis, thrombocytopenia and skin wounds. Studies have shown that Enoxaparin is better because of more efficacy and less side effects and easier introduction. Due to routine and extreme use of these anti coagulants in several hospital wards, we decided to study their side effects and compare the difference between their effects.

Methods:

In a clinical trial study on 180 patients who are admitted in CCU and Heart wards of Ardabil Imam Khomeini Hospital, we compared the side effects of these two drugs (Heparin and Enoxaparin) between two groups of 90 patients which are adjusted by age and gender. Data gathered via daily visits and filled into forms in first 3 to 5 days of admission.

Findings:

There is no significant difference in total side effects of these two drugs, but the quantity of side effects is higher in Heparin group.

Result:

Albeit there is no difference in total side effects between Heparin and Enoxaparin group, But in a Denotative discussion, the results show significant increase in hematuria, hemoptysis, GI bleeding and thrombocytopenia in Heparin group, and an increase in ecchymosis in Enoxaparin group. The results show no case of CVA, alopecia and allergy. We suggest making a similar investigation with longer period of study in more patients to obtain precise results.

Keywords: Heparin, Enoxaparin, Side effect.