Evaluation of the effects and side effects of oral aspirin and subcutaneous enoxaparin after knee arthroplasty in Ardabils hospitals from 1397-1399

Abstract

Background: **:** One of the complications of knee arthroplasty is venous thromboembolism, which can be prevented with drugs such as enoxaparin and aspirin.

Aim: In this study, the results of using these two drugs,asprin and enoxaparin to prevent thromboembolism following knee arthroplasty were investigated..

Methods and meterials: In this cross-sectional descriptive-analytic study,files of two kinds of patients were extracted. 150 patients who received aspirin at a dose of 80 mg twice a day orally for 3 weeks after surgery . another 150 patients who received Enoxaparin at a dose of 40 mg daily injected subcutaneously around the abdomen for 2 weeks . Information required for each patient was collected from the patient's files ,the treating physician and questions from the patients themselves.

Results*:* The number of 300 patients who underwent knee replacement surgery in this study was 146 (48.7%) female and 154 (51.3%) male. The mean and standard deviation of patients' age were 65.5 and 4.3, respectively. 150 patients received enoxaparin for prophylaxis of thromboembolism and another 150 received aspirin. In enoxaparin group: Postoperative bleeding did not occur in any of the patients. And none of the patients had a significant decrease in hemoglobin or the need to receive pack cell. A total of 10 patients (6.7%) developed symptoms of thromboembolism after the second week of surgery. 2% of patients with pulmonary embolism and 7 patients (4.7%) with deep vein thrombosis. In the aspirin group: No thromboembolism occurred in any of the patients in the asprin group.21 patients (14%) had postoperative bleeding. In 19 patients (12.7%) there was bleeding at the operation site. Eight patients (5.3%) needed reoperation. In these patients, an additional pack cell unit was injected due to a decrease in hemoglobin. And 2 patients (1.3%) developed epistaxis. Postoperative bleeding and decreased hemoglobin and the need to receive a cell pack was significantly correlated with asprin use, and postoperative thromboembolism with the enoxaparin use).The difference in other variables between to groups were not significant.

Conclusion: Aspirin is more effective in the prophylaxis of thromboembolism after knee replacement surgery than enoxaparin, but its side effects of bleeding and a decrease in hemoglobin and the need to receive a pack cell are greater.

Keywords: Enoxaparin, Aspirin, Thromboembolism..