Evaluationof the effectsand side effects of oral Aspirin and oral Rivaroxabanafter 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 rivaroxaban and aspirin.

Aim*:* In this study, we compare the efficay and side effects of aspirin and rivaroxaban for prophylaxis following knee replacement surgery**.**

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 rivaroxaban orally at a dose of 10 mg daily for 15 days. Information required for each patient through the study of patients' files, questions from the treating physician and questions from the patients themselves were collected.

Results: The number of 300 patients who underwent knee replacement surgery in this study was 148 (49.3%) female and 152 (50.7%) male. The mean and standard deviation of patients' age were 64.1 and 4.3, respectively None of the patients developed thromboembolism in either group treated with aspirin or rivaroxaban. Also, postoperative infection was not observed in any of the two groups. Differenc in postoperative bleeding was not statistically significant between the two groups. Also, there was no statistically significant difference between the two groups in the decrease in hemoglobin and the need to receive additional cell packs after surgery.

***Conclusion*:** Both aspirin and rivaroxaban in the prophylaxis of thrombotic events after knee replacement surgery effectively prevented thromboembolism. There was no significant difference between the two groups in postoperative bleeding and the need to receive pack cell.

***Keywords*:** Venous thromboembolism, Aspirin, Rivaroxaban..