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# Rivaroxaban versus enoxaparin: comparison of outpatient medication adherence in clinical practice

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## OBJECTIVES

**Background:**

Rivaroxaban (Riv) is a selective, direct Factor Xa inhibitor indicated in the prevention of venous thromboembolism in adult patients undergoing elective hip or knee replacement surgery (HKRS).[1] It was introduced in the pharmacotherapeutic formulary of the Hospital Centre of Cova da Beira (CHCB) on February/2011. It is administered orally, which is a potential advantage in terms of compliance when compared to enoxaparin (Eno).

**Purpose:**

The aim of this study was to compare adherence to Eno versus Riv in adult patients undergoing elective HKRS. The occurrence of adverse drug reactions (ADRs) was also compared in both groups.

## METHODS

Cross-sectional study of outpatient compliance to Eno or Riv, in patients undergoing HKRS in CHCB, from February/2011 to April/2012. The evaluation of medication adherence was carried out using a validated questionnaire and the occurrence of ADRs was evaluated in a structured interview.

**Tabela 1 – Rate of adherence to anticoagulants**

| Anticoagulant therapy | Number of patients included in the study | Rate of adherence |
|---|---|---|
| Eno | 41 | 92,7% |
| Riv | 19 | 89,5% |

## RESULTS

The study included a total of 60 patients, who underwent elective knee (29 patients) or hip (31 patients) surgery; 41 patients were subjected to therapy with Eno (17 knee + 24 hip) and 19 with Riv (12 knee + 7 hip). In all, 91.7% patients were considered adherent to medication, but it was not observed a significant difference (P=1) between patients anticoagulated with Eno (92.7% adherent) or Riv (89.5% adherent). Similarly, there was no significant difference (P=0.35) in medication adherence between patients undergoing knee or hip surgery. However, there was a significantly higher occurrence of ADRs (P=0.001) in patients treated with Eno (39.0%; hematoma in the site of injection) when compared to patients treated with Riv (there was no ADRs attributable to this drug).

## DISCUSSION / CONCLUSIONS

Although it was not observed a significant difference in adherence to subcutaneous Eno vs oral Riv, which may be potentially attributed to the short-term anticoagulation therapy (2 to 5 weeks), the occurrence of ADRs was significantly lower in patients treated with the oral anticoagulant. This difference in drug-related adverse events differs from other studies that detected similar adverse-event profiles.[2] From a methodological point of view, this is a small cross-sectional study and our results must be considered exploratory in nature.

## BIBLIOGRAPHY

[1] Abrams PJ, Emerson CR. Rivaroxaban: A novel, oral, direct factor Xa inhibitor. Pharmacotherapy. 2009;29(2):167–181;

[2] Lassen MR, Ageno W, Borris LC, Lieberman JR, Rosencher N, Bandel TJ, et al. Rivaroxaban versus enoxaparin for thromboprophylaxis after total knee arthroplasty. N Engl J Med 2008;358:2776-86.

**Conflicts of Interest: nothing to disclose.**

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