

Background and Importance The prevalence of pain in post-operative patients is 88.2%, with moderate to severe pain in 19.6% of cases.

Aim and Objectives The objective was to describe pharmaceutical interventions in pain management and the impact on patient-reported pain on admission and discharge and patient satisfaction.

Material and Methods A prospective interventional study (March-May 2023) in hospitalised adult patients admitted in general or trauma surgery was carried out.

Outcome measures patient-perceived pain (VAS) and patient satisfaction.

Pharmaceutical interventions were made 48 and 96 hours after surgery (at bedside) and 48 hours after discharge (by telephone):

1. Admission:

1.1. Reminding nurses of recording VAS (one per nursing shift).

1.2. If $VAS \geq 4$, interventions in analgesia prescription and/or in nurse's administration

1.3 Patient education on VAS scale, therapeutic options and the importance of asking for analgesia if pain.

2. Discharge:

2.1. If $VAS > 2$ patients were reminded how to take analgesia. If no analgesia prescribed, the patient was referred to a primary care physician (PCP).

2.2. If they took the prescribed medication and $VAS = 4-6$, they were referred to PCP and if $VAS \geq 7$, to the emergency department.

A descriptive analysis was used.

Results Sixty patients were included, mean age of 66.7 (± 16.4) years

On admission, 94 interventions were made (92.3% accepted): to encourage VAS recording ($n=26$), administer analgesia ($n=18$), prescribe analgesia ($n=18$), increase therapeutic step ($n=17$) and patient education ($n=15$).

An increase in VAS recording was observed (56.7% vs 76.3%). There was a progressive decrease in current patient-reported pain (2.1 vs 1.9 vs 1.4) and maximum pain in last 24 hours (3.2 vs 2.7 vs 2.3) and in the number of patients with $VAS \geq 4$.

At discharge, 39 interventions were performed: 23 patients were reminded how to take the prescribed analgesia, 15 were referred to PCP for lack of analgesia prescription or moderate pain, and one was referred to the emergency department.

Satisfaction with postoperative pain management and the pharmaceutical care was 7.9 (± 2.1) and 9.7 (± 0.5), respectively.

Conclusion and Relevance Pharmaceutical interventions on education, recording, administration and prescription of analgesics might have contributed to a gradual reduction in patient-reported pain. The pharmacist plays a role in the management of postoperative pain during admission and at discharge with high patient satisfaction.

REFERENCES AND/OR ACKNOWLEDGEMENTS

Conflict of Interest No conflict of interest.

4CPS-003 EVALUATION OF CLINICAL VARIABLES IMPACT ON ENOXAPARIN DOSING AND ANTIXA CONCENTRATION

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Background and Importance Monitoring enoxaparin is not routine as per guidelines but is recommended in renal insufficiency and debated for extreme body weights and pregnancy.

Aim and Objectives This study aims to assess enoxaparin monitoring in hospitalised patients and identify variables that correlate with its efficacy.

Material and Methods A descriptive, single-centre, retrospective study was conducted. Hospitalised patients receiving therapeutic enoxaparin doses were included, with measurement of peak anti-Xa concentration between December 2021 and January 2023. Patients undergoing renal replacement therapies were excluded.

Demographic data, laboratory and clinical parameters, and enoxaparin-related details were collected. Obesity was defined as body mass index ≥ 30 kg/m². Multiple linear regression was used to analyse the relationship between anti-Xa concentration and different variables including enoxaparin dose, obesity, renal impairment (ClCr < 30mL/min), and critical status. Suggested peak target range for anti-Xa is 0.5–1.1 IU/mL. STATA/BE was used to assess their correlation with Pearson coefficient and determine the best predictor.

Results A total of 147 patients were included, with a mean \pm SD age of 68 years (± 12.29), weight of 85.03 kg (± 22.92), and a BMI of 29.64 kg/m² (± 0.61). Among the study population, 64 patients (43.5%) were obese, 15 (10.2%) had renal impairment, and 78 (53.1%) were critical patients. Mean \pm SD enoxaparin dose was 0.93 mg/kg (± 0.13), and no significant differences were observed between obese (0.91 ± 0.15 mg/kg) and non-obese (0.95 ± 0.02 mg/kg) populations ($p=0.104$). Seventy-nine patients (53.7%) presented anti-Xa concentrations out of range; 36 of them (45.6%) were obese.

In the multiple regression analysis, we observed a statistically significant effect of enoxaparin dose ($p < 0.001$) and obesity ($p=0.007$) in anti-Xa concentrations.

Using the final model, we found a good correlation between anti-Xa concentration and enoxaparin dose ($p < 0.001$). Pearson coefficient of 0.56 was obtained for the non-obese population, while it was of 0.16 in the obese population.

Conclusion and Relevance In our study, we identified obesity as a variable that showed a significant effect on anti-Xa concentration. We confirmed the existence of a linear association between anti-Xa concentration and enoxaparin dose for the non-obese population. For the obese population, a poor correlation between anti-Xa concentration and enoxaparin was found suggesting the need for monitoring due to less predictable pharmacokinetics.

REFERENCES AND/OR ACKNOWLEDGEMENTS

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4CPS-004 IMPACT OF INADEQUATE EMPIRICAL THERAPY ON THE MORTALITY RATE IN PSEUDOMONAS AERUGINOSA INFECTIONS

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Background and Importance The appropriate use of antibiotics and their clinical impact is a necessary field of study to address the high incidence of resistance.