

REFERENCES AND/OR ACKNOWLEDGEMENTS

Conflict of interest No conflict of interest

5PSQ-125 EFFECT OF A MULTIFACETED CLINICAL DECISION SUPPORT INTERVENTION ON ADHERENCE TO THROMBOPROPHYLAXIS GUIDELINES IN NON-SURGICAL PATIENTS

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Background and importance Venous thromboembolism (VTE) is a potentially fatal complication of hospitalisation, affecting approximately 3% of non-surgical patients. Administration of low molecular weight heparins to appropriate patients adequately decreases the incidence of VTE but a low guideline adherence is described in the literature.

Aim and objectives A multifaceted intervention was introduced to increase adherence to thromboprophylaxis guidelines in non-surgical patients. The primary objective was to determine the effect on guideline adherence. The secondary objective was to study the effect on guideline adherence specifically in patients with a high VTE risk. As an exploratory objective, we determined how many VTEs may have been prevented by the multifaceted intervention.

Material and methods A prospective study with a pre- and post-intervention measurement was conducted between October 2018 and March 2020. A multifaceted intervention, consisting of clinical decision support (CDS), a mobile phone application, monitoring of duplicate anticoagulant medication and training, was implemented. Adherence to guidelines was assessed by calculating the Padua prediction score and improve bleeding risk score for each patient, based on electronic health record (EHR) documentation. Adherence to guidelines was analysed by univariate and multivariate logistic regression.

Results 170 patients were included: 85 in the control group and 85 in the intervention group. The intervention significantly increased guideline adherence from 42/85 of the patients in the control group to 70/85 in the intervention group (OR 4.78; 95% CI 2.37 to 9.63). Guideline adherence in the patient group with a high VTE risk also increased significantly from 30/55 to 43/51 (OR 2.46; 95% CI 1.31 to 4.62). Extrapolation of these results to an annual admission rate of 25 000 patients in our hospital resulted in the potential prevention of ±261 VTEs per year.

Conclusion and relevance Our multifaceted intervention significantly increased adherence to thromboprophylaxis guidelines. To our knowledge, this is the first study describing such a large effect after the implementation of a multifaceted intervention. We believe this is mostly due to the design of our CDS, which is built-in to the EHR and has a highly specific design; it only alerts prescribers if patients actually have a high VTE risk and are not treated with anticoagulant therapy.

REFERENCES AND/OR ACKNOWLEDGEMENTS

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5PSQ-126 AVICENNE AS A CLINICAL DECISION SUPPORT IN THROMBOPROPHYLAXIS: JUST BECAUSE THE PATIENT'S SITUATION IS IMPROVING DOESN'T MEAN THERE'S NO DRUG RELATED PROBLEM!

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Background and importance Pharmacological thromboprophylaxis reduces the risk of pulmonary embolism and deep vein thrombosis. Enoxaparin once a day is more relevant than unfractionated heparin (UFH) twice a day when glomerular filtration rate is >30 mL/min. The threefold alliance AVICENNE, as a real time clinical decision support system, works on the patient's data, pharmaceutical algorithms (PA) and Pharmaclax (Keenturtle-F).

Aim and objectives To show the value of one AVICENNE algorithm in detecting UFH which was not indicated, and the acceptance by the physician of the switch to enoxaparin proposed by the pharmacist.

Material and methods A prospective study was carried out from March 2019 to September 2020 in two health facilities (1600 beds). One algorithm was encoded in Pharmaclax to detect patients with a UFH prescription and two glomerular filtration rate measurements >30 mL/min, the second higher than the first. A guideline detailed the pharmaceutical analysis, from history taking of detected DRPs to reporting of pharmaceutical interventions (PI). The first outcome was the number of detected DRPs and accepted PIs. The second outcome was the number of injections and hospital cost avoided.

Results The data were collected over 250 non-consecutive days. First, the pharmacist confirmed 98 DRPs after anamnesis and 96 PIs proposing the switch from UFH and enoxaparin. A total of 41 PIs (43%) were accepted by physicians. The secondary outcome included savings of 353 injections, providing a minimal cost saving of 1700€.

Conclusion and relevance AVICENNE optimises patients' thromboprophylaxis management by triggering a pharmaceutical analysis on DRPs which are complex to detect. What is original is that this study showed that pharmaceutical analysis stayed relevant although the clinical and biological situation of the patient was improving.

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5PSQ-127 ASSESSING APPROPRIATE DOSING OF NEW ORAL ANTICOAGULANTS: APIXABAN, DABIGATRAN AND RIVAROXABAN IN A TERTIARY HOSPITAL

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Background and importance For a long time, vitamin K antagonists (VKAs), such as warfarin and acenocoumarol, have remained firstline anticoagulation therapy. Despite their

effectiveness and low cost, the need for frequent monitoring and dose adjustments has highlighted the importance of introducing into clinical practice new oral anticoagulants (NOACs) to increase safety and obtain more predictable results.

Aim and objectives The aim of the study was to determine dose adequacy of three new oral anticoagulants (apixaban, dabigatran and rivaroxaban) prescribed in clinical practice.

Material and methods An observational prospective study was conducted in a tertiary hospital over a 6 month period. All patients with a prescription for apixaban, dabigatran or rivaroxaban were eligible for the study. Demographic (age, gender, medical history) and clinical (weight, NOAC type and dose, diagnosis and renal function calculated with the MKP-EPI form) data were recorded in a chart, and dose adequacy was assessed and reviewed by two different investigators. The results were analysed using a multivariable logistic regression technique with a 95% significance level.

Results After excluding 3 patients due to incomplete data, 138 patients, 56% men, were recruited. From these, 40% of the patients were prescribed apixaban, 25% dabigatran and 34% rivaroxaban. The statistical analysis adjusted by sex and age showed that the risk of inadequacy was significant when using apixaban ($p < 0.001$, OR 8.4) and dabigatran ($p < 0.006$, OR 7.0). This could be explained by the fact that the most prevalent diagnosis was auricular fibrillation. In this indication, rivaroxaban is adjusted by creatinine clearance while apixaban is adjusted by weight, age and clearance, and dabigatran by age, concomitant treatment with verapamil and clearance. Lower doses were significantly inadequate compared with higher doses (apixaban 2.5 mg/12 hours ($p < 0.000$), dabigatran 110 mg/12 hours ($p < 0.002$) and rivaroxaban 15 mg/12 hours ($p < 0.036$)). Rivaroxaban was the nearest to an adequate prescription.

Conclusion and relevance In conclusion, it seems that at least for auricular fibrillation, rivaroxaban constitutes the agent with the best adequacy, probably due to its simpler adjustment. Furthermore, with the three drugs, lower doses tended to be less adequate than higher doses, which raises the question of whether patients are under dosed. More training is needed to correctly prescribe this group of drugs.

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5PSQ-128 WHICH ENOXAPARIN PREVENTIVE DOSAGE TO CHOOSE FOR OBESE PATIENTS IN ORTHOPAEDIC SURGERY?

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Background and importance In our orthopaedic surgery centre, prescribers seem to use different dosages of enoxaparin for the prevention of the thromboembolic risk for obese patients. Systematically, the dosage is adapted to renal function, but there are no guidelines for obese patients.

Aim and objectives The aim was to analyse the prescribing practices to create an internal protocol.

Material and methods This was a retrospective study from 1 January 2020 to 28 February 2020 of every enoxaparin prescription for a preventive dosage in orthopaedic surgery. We

compared enoxaparin's dosage with different criteria: sex, age, weight, body mass index (BMI), glomerular filtration flow, surgical and medical history, chronic treatment, surgical indication and prescribers.

Results We included 517 patients (table 1).

Abstract 5PSQ-128 Table 1

| Enoxaparin dose/day | No (%) of patients | Median BMI (kg/m ²) | Median weight (kg) |
|---------------------|--------------------|---------------------------------|--------------------|
| 2000 IU | 20 (4) | 20.5 | 50 |
| 4000 IU | 462 (89) | 24.7 | 71 |
| 6000 IU | 21 (4) | 31.3 | 90 |
| 8000 IU | 14 (3) | 37.5 | 110 |

Every patient with a dosage higher than 4000 IU (35/517) weighed >80 kg. Among them, 7 patients (19.4%) had a BMI >40 kg/m². These patients received 4000 IU of enoxaparin twice a day or 6000 IU in one administration. 20 of 517 patients were of low weight (<45 kg for women and <57 kg for men), and among them 6 (30%) received <4000 IU/day. Apart from renal function, no other criteria influenced the dose of enoxaparin. There was a disparity in dosages between prescribers. Of 19 prescribers, 7 (36.8%) occasionally, and 1 systematically, increased the dose of enoxaparin for weights >80 kg and BMI <40 kg/m². No thrombosis or haemorrhage occurred for dosages >4000 IU/day.

Conclusion and relevance European studies are based only on BMI or weight: increased dosage of enoxaparin for BMI higher than 40 kg/m² and more or less weight higher than 100 kg. The heterogeneity of prescriptions between prescribers and by prescribers highlights the lack of consensus. Adapting the dosage for a weight >80 kg does not seem appropriate because it includes non-obese patients with an increased risk of bleeding. Work in tandem with anaesthesiologists is underway to harmonise practices in our centre.

REFERENCES AND/OR ACKNOWLEDGEMENTS

1. Tzu-Fei Wang, *et al.* Efficacy and safety of high dose thromboprophylaxis in morbidly obese inpatients.
2. Freeman A, *et al.* Prevention of venous thromboembolism in obesity.

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5PSQ-129 MANAGEMENT OF MULTIFACTORIAL ANAEMIA WITH SUBCUTANEOUS DARBEPOETIN WITH INITIAL MONTHLY DOSAGE, OMITTING INDUCTION ACCORDING TO THE TECHNICAL DATA SHEET, IN ELDERLY PATIENTS

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Background and importance Multifactorial anaemia is a common disease in elderly patients, usually treated with darbepoetin in different dosages.

Aim and objectives To maintain normal haemoglobin (Hb) values (>12 g/dL in women and >13 g/dL in men according to