

Conclusions: The consolidation of a working group, the construction of an academic space -in order to learn, disseminate the GRADE methodology and critical reading of evidence-, the training and participation of the potential users of the final recommendations, could improve health care outcomes. It is pending to measure postimplementation adherence.

PO174 | Pharmacological Venous Thromboembolism Prophylaxis in an Internal Medicine Ward: Cross-sectional Observational Study

<u>G. Durao-Carvalho</u>; A. Canoso; J. Louro; R. Amorim Department of Internal Medicine | Centro Hospitalar do Oeste -Unidade de Caldas da Rainha, Caldas da Rainha, Portugal

Background: Half of the venous thromboembolism (VTE) cases occur in inpatients.

Aims: Use of pharmacological VTE prophylaxis in medical inpatients. Methods: Observational, cross-sectional study with inpatients (≥ 24h since admission) at the Internal Medicine ward, on a random weekday. IMPROVE VTE and IMPROVE bleeding risk (BR) scores were calculated, with stratification into 3 risk cohorts.

Results: 38 patients, 44,7% males, median age of 80 years old. 60,5% had a low-molecular-weight heparin (LMWH) prescribed (15 patients - prophylactic dose; 8 - therapeutical dose). No other anticoagulation drug was found.

- VTE low-risk cohort: 6 patients were anticoagulated. 2 of them
 had clinical indication related to the hospitalization diagnosis (pulmonary embolism [PE] and acute coronary syndrome). The other
 4 were doing prophylactic LMWH for no clinical reason.
- VTE moderate-risk cohort (n = 16), 11 had LMWH 5 patients on a therapeutical dose due to the main diagnosis and/or because of other comorbidities and the remaining 6 on a prophylactic dose. Among these 6 patients, 5 had a low BR (<7) and the researchers agreed with the prescription. The remaining patient had an IMPROVE BR score ≥ 7, which gave a major BR of 4,1% (global BR 7,9%). Because VTE risk was lower (1,5%), we think that this prophylactic LMWH was inappropriate. In the subgroup without LMWH (n = 5), all patients had a low BR (major BR 0,4%; any hemorrhage risk 1,5%).
- VTE high-risk cohort (*n* = 8), 6 patients had LMWH (5 prophylactic dose; 1- therapeutical dose). Among the 5 patients with prophylactic dose, 2 patients had high BR. The patient with LMWH therapeutical dose had a PE and a low BR. In the VTE high-risk level, 2 pts were not doing LMWH (1- high BR; 1- low BR).

Conclusions: 13,2% of patients were inadequately prescribed prophylactic LMWH. Among those with formal indication to prophylactic LMWH, 15,8% were not doing it.

PO185 | Analysis of Risk Factors for Hemorrhagic Complications of Anticoagulant Therapy

N. Vorobyeva^{1,2}; A. Shchapkov²; E. Melnichuk²

¹National Medical Research Center for Hematology (Northern Branch) Ministry of Health of Russia, Arckhangelsk, Russian Federation; ²Northern State Medical University Ministry of Health of Russia, Arckhangelsk, Russian Federation

Background: Anticoagulant therapy (ACT) with vitamin K antagonists (AVC) and direct oral anticoagulants (DOAC) requires an assessment of such risk factors as concomitant pathology and its therapy.

Aims: The aim is to analyze the factors contributing to the development of hemorrhagic complications on the background of ACT.

Methods: The analysis of the case histories of 50 patients admitted to the First State Clinical Hospital named after E. E. Volosevich in the period 2014–2020 was made. The presence of causes, outcomes of complications, their frequency, concomitant pathology, the level of INR (international normalized ratio) and blood pressure (BP) during hospitalization were studied.

Results: 50 patients (23 women and 22 men) aged 46 to 83 years (lu = 67) who received the ACT were hospitalized with a diagnosis of "hemorrhagic stroke/intracranial hemorrhage", confirmed clinically and on CT. Fatal outcome in 40% (n = 20) of patients. 37 patients (74%) took Warfarin, 13 patients (26%) - DOAC.

6 patients received Omeprazole (12%), 5 - Digoxin (10%), 1 - Rosuvastatin (2%), 17 - Atorvastatin (34%). Taking these drugs together with Warfarin requires monitoring the degree of hypocoagulation.

At the admission of 16 patients (32%) with blood pressure within: 160 / 100-179 / 109 and 20-(40%) with a blood pressure of 180/110 or higher. Uncontrolled blood pressure can increase the risk of hemorrhagic complications.

40% (n = 20) of patients had impaired renal function, liver – 20% (n = 10), thyroid – 12% (n = 3). The INR value in admission was more than 3 in 50% (n = 25) of patients taking AVC-excessive hypocoagulation.

Conclusions: BP, impaired kidney and liver function, their therapy can increase the rate of fatal bleeding. It is necessary to correct the concomitant pathology, to assess the pharmacokinetics of the drugs and the patient's adherence to treatment.

PO186 | Efficacy of Preoperative Prevention in Venous Thromboembolism at Endoscopic Urological Interventions

E. Shorikov; P. Shorikov; <u>D. Shorikova</u> Bukovinian State Medical University, Chernivtsy, Ukraine

Background: Different studies indicate a frequency of postoperative thrombosis from 20 to 59%. More than 70% of venous thrombosis after endoscopic interventions are asymptomatic and undiagnosed (Cushman M., 2007). However, in 3.9% of cases they be accompanied



by severe thromboembolic complications (Decousus H., 2010, Gillet JL, 2015; Avram J., 2010).

Aims: To analize the efficacy of venous thromboembolism prevention with different prophylactic schemes in preoperative period of endoscopic urological interventions.

Methods: It was researched 559 clinical cases after urological endoscopic interventions: 177 patients with preoperative prevention by unfractionated heparin, 136 patients with prophylaxis with low molecular heparin, 127 patients with preoperative cava-filters implantation, 119 patients with rivaroxaban prophylaxis were included. Results: It is proved that antithrombotic preoperative prophylaxis in abdominal surgery is effective and mandatory in patients with high risk of venous thromboembolism. The highest efficiency of preoperative prophylaxis is proved by using cava-filters (P = 0.069). It was not shown the reliable differences between unfractionated and low molecular weight heparins in the incidence of venous thromboembolism (χ^2 = 0,165; p₁ = 0,685; p₂ = 0,983) after usage of these schemes in preoperative period at surgical patients. It has been established that combined prevention schemes and usage of new oral anticoagulants (direct inhibitors of Xa factor) is more efficiency, than therapy with heparin for postoperative thrombosis prophylaxis $(\chi^2 = 12,382; p_1 = 0,002; p_2 = 0,006).$

Conclusions: After long-term prospective observation it has been proven, that therapy with new oral anticoagulants (rivaroxaban) in postoperative period is necessary step for thromboembolism prevention, which contributes to the clott regression, such clinical as ultrasound.

VTE TREATMENT

PB1236 | Outcomes of Non-bleeding Patients on Warfarin with an INR > 10, who Received Vitamin K or Conservative Therapy

A. Jones¹; S. Vazquez²; G. Barnes³; C. Anderson⁴; S. Woller⁴; S. Stevens⁴; N. Clark⁵; T. Delate⁶; M. Crowthrm⁷; D. Witt⁸

¹University of Utah School of Medicine, Salt Lake City, United States; ²University of Utah Health, Murray, United States; ³University of Michigan Health System, Ann Arbor, United States; ⁴Intermountain Healthcare, Murray, United States; ⁵Kaiser Permanente Colorado, Aurora, United States; ⁶Kaiser Permanente National Pharmacy, Aurora, United States; ⁷McMaster University, Hamilton, Canada; ⁸University of Utah College of Pharmacy, Salt Lake City, United States

Background: Warfarin frequently causes increased healthcare utilization for major bleeding. Warfarin's anticoagulant effect is measured by the international normalized ratio (INR). Elevated INRs are associated with an increased risk of bleeding. Currently, consensus guidelines based on low-quality evidence suggest treating patients who are not bleeding and have an INR ≥10 with oral vitamin K. In contrast, recommendations for patients with elevated INRs from 4.5–10 are to simply hold warfarin.

Aims: Assess the association between temporary discontinuation of warfarin with or without any over-the-counter or dietary vitamin K (conservative therapy) versus prescription vitamin K (vitamin K) and bleeding (ISTH definitions for major and clinically relevant non-major), any arterial or venous thromboembolism (TE), and all-cause mortality at 30 days after initial INR ≥10, and time to INR < 4.0.

Methods: This was a multi-center observational cohort study. Data were pooled using multivariable random-effects modeling for outcome analysis.

Results: Across four sites, 563 and 705 patients comprised the conservative and vitamin K groups, respectively (Table). There were 53 (9.4%) and 52 (7.4%) bleeding events in the conservative and vitamin K groups, respectively. TE events occurred in 4 (0.8%) and 11 (1.6%) of conservative and vitamin K group patients, respectively. Unadjusted odds ratios (with 95% confidence intervals) comparing conservative therapy to vitamin K at 30 days were (Figure): all bleeding (OR: 1.22 [0.77–1.92]), major bleeding (OR: 1.07 [0.55–2.09]), TE (OR: 0.45, [0.14–1.45]), and all-cause mortality (0.67 [0.46–0.97]). The mean difference in time to INR <4.0 was 0.77 days [95% CI 0.03–1.52, P = 0.04] favoring vitamin K.