0.62 (0.64) mg/dL, AGP 85.21 (22.00) mg/dL and FC 174.75 (220.25) µg/g. Clinical status after the intervention was GGC 43 (78.18%), RGC 11 (20%) and BGC 1 (1.82%).

Conclusion and relevance After the intervention, patients showed a tendency to decreased inflammatory parameters and clinical improvement, with a subjective reduction in symptoms. TDM in association with recommendations of the pharmacy service are valuable strategies in optimising IBD treatment to avoid loss of response and achieve better clinical outcomes.

REFERENCES AND/OR ACKNOWLEDGEMENTS

Conflict of interest No conflict of interest

5PSQ-123 SGLT2 INHIBITORS IN TYPE 2 DIABETES PATIENTS WITH NON-ALCOHOLIC FATTY LIVER DISEASES: AN UMBRELLA REVIEW OF SYSTEMATIC REVIEWS

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Background and importance Sodium–glucose co-transporter 2 (SGLT2) inhibitors have been reported to benefit liver function in patients with type 2 diabetes (T2D) with non-alcoholic fatty liver disease (NAFLD). Although some systematic reviews and meta-analyses have demonstrated the hepatic benefits from SGLT2 inhibitors in T2D patients with NAFLD, the overall findings and quality of these systematic reviews have not been evaluated.

Aim and objectives The aim of this study was to critically appraise existing systematic reviews to consolidate evidence associating the use of SGLT2 inhibitors with beneficial hepatic results for T2D patients with NAFLD.

Material and methods This umbrella review searched relevant published systematic reviews of clinical trials from PubMed and Embase between inception and 16 September 2020. The search strategy combined selected keywords (eg, SGLT2 inhibitors and NAFLD) with MeSH or Emtree terms and directed clinical queries for systematic reviews (eg, systematic (sb) in PUBMED). Articles eligible for inclusion were systematic reviews examining the effectiveness of SGLT2 inhibitors for T2D with NAFLD in clinical trials. Two independent investigators appraised study quality using AMSTAR 2, and extracted the hepatic effects from SGLT2 inhibitors (eg, liver enzymes, liver fat, liver histology, liver cirrhosis and liver cancer) in the included systematic reviews.

Results Of 25 screened potential systematic reviews, we ultimately included seven in this study. However, none could be rated as being of high methodological quality. Five systematic reviews indicated that SGLT2 inhibitors could effectively decrease liver fat and liver parameters of alanine aminotransferase and gamma-glutamyl transferase in patients with NAFLD. Two systematic review indicated that SGLT2 inhibitors could reduce hepatosteatosis, as supported by biopsy proven evidence of improvement from a small clinical trial, but no evidence of improvement of liver fibrosis was found.

Conclusion and relevance There was some association between SGLT2 inhibitor uses and observed benefits to liver function in T2D patients with NAFLD, although the quality of the

current systematic reviews remains relatively low. Further evaluation of long term liver outcomes with SGLT2 inhibitors in liver cirrhosis and liver cancer is warranted.

REFERENCES AND/OR ACKNOWLEDGEMENTS

Conflict of interest No conflict of interest

5PSQ-124 ANTICOAGULATION MANAGEMENT WITHIN A HOSPITAL SETTING: IDENTIFYING RISK FACTORS AFFECTING PATIENT SAFETY

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Background and importance Anticoagulants are used hospital wide throughout the patient trajectory involving many health-care providers. Given their widespread use and risk profile, they are classified as high risk. Despite the many precautions and vast experience with these drugs, errors often occur in daily practice.

Aim and objectives To investigate which factors currently negatively affect patient safety in our hospital.

Material and methods We performed a retrospective data analysis based on incident reports and registered usage (2018–2019) as well as on pharmaceutical recommendations (3 months period in 2019) related to anticoagulants and antiaggregants. The data were obtained from the hospital information systems. Additionally, we surveyed doctors and trainees working in our hospital, via Google Forms, asking multiple choice questions inquiring into their experiences. They were asked to participate via email, and participation was voluntary and anonymous. All data were processed via Microsoft Excel and discussed within the anticoagulation stewardship committee.

Results *Retrospective data analysis:* 172 incidents and 132 pharmaceutical recommendations were included. Most incidents were related to low molecular weight heparin (45%) and took place in a surgery ward (37%). In 35% of cases, the incident could be linked to transfer to another ward or operating room. Problems in terms of administration (38%), communication (30%) and prescription (24%) were the main risk factors.

Survey: 74 doctors, representing 21 disciplines, answered the questionnaire. Non-prescribing of therapy was considered to be the main problem (49%), followed by incorrect dosing (42%). Lack of communication was a tricky issue: only 23% agreed that the patient receives sufficient information on paper. 51% thought that the policy was followed consistently hospital wide. Only 28% thought that new employees were sufficiently informed about the hospital wide agreements. Additional monitoring by a clinical pharmacist would be considered an added value by 88% of the doctors.

Conclusion and relevance A number of risk factors were identified, such as education of all healthcare professionals, communication, the IT systems used, the opening of temporary wards and transfer of patients within the hospital. It is our opinion that a multidisciplinary, centralised approach with a focus on monitoring is imperative. The use of a clinical pharmacist could play an important role.

REFERENCES AND/OR ACKNOWLEDGEMENTS

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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

Conflict of interest No conflict of interest

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 Pharmaclass (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 Pharmaclass 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.

REFERENCES AND/OR ACKNOWLEDGEMENTS

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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