

EJA

European Journal
of
Anaesthesiology

Euroanaesthesia 2019
The European Anaesthesiology Congress

Abstracts Programme
Vienna, Austria, 1 - 3 June

Abstracts

EUROANAESTHESIA 2019

The European Anaesthesiology Congress

1 - 3 June 2019

Vienna, Austria

before interventional surgery. This decision rests on balancing the risk of bleeding with coronary artery stent thrombosis. The exact duration for which these drugs should be discontinued remains unclear, and a period of 3-7 days is recommended, based on the pharmacokinetics and dynamics of the P2Y12 inhibitor. This study was done to investigate coagulation and thrombocyte function prior to and after discontinuation of ticagrelor, in patients who underwent PCI, are taking ticagrelor but discontinue it after one year of therapy in accordance with hospital routines.

Materials and methods: This was a prospective, longitudinal, observational study including 24 patients. Blood was taken on day 0, before stopping ticagrelor, and then on day 1, 3, 5 and 8 after discontinuation. All patients except one were also taking aspirin. Samples were analyzed using Multiplate (multiple electrode aggregometry), VerifyNow (a light-transmission aggregometry based method) and TEG (thromboelastography). Multiplate and VerifyNow results, normally distributed, were analyzed using paired-samples t-test and data not normally distributed was analyzed using McNemar's test and Wilcoxon's signed-rank test, as appropriate. P-values shown are compared with baseline. Results were evaluated using SPSS statistics.

Results and discussion: In interventional surgery more than 30 arbitrary units per minute (Multiplate) and more than 200 platelet reactivity units (VerifyNow) is usually acceptable. This is considered approximately 20% platelet inhibition. On day 3 after ticagrelor discontinuation, 100% ($p=0.016$) and 75% ($p<0.001$) of patients had reached these levels on Multiplate and VerifyNow tests, respectively. On day 5 the corresponding figures were 100% ($p=0.016$) and 91% ($p<0.001$).

Conclusion: These results support earlier findings that surgery 3 days after ticagrelor discontinuation can be accepted when bleeding risk is moderate and surgery is life-prolonging. VerifyNow may be used to confirm adequate platelet function before planned surgery due to the interindividual differences.

12AP06-10

Comparison of data received with low-frequency piezoelectric thromboelastography (LPTEG) in patients with different pneumoperitoneum pressures in intraoperative bariatric settings.

Tarabrin O.¹, Sukhonos R.¹, Suslov O.¹, Volodychev D.¹, Basenko I.¹, Bugaenko E.¹, Tarabrin P.¹

¹Odessa National Medical University - Odessa (Ukraine)

Background and Goal of Study: Bariatric surgery is well known for obese patients treatment due to its benefits. Postoperative venous thromboembolism (VTE) is less common in this cohort. The aim of this study is to compare LPTEG data received in intraoperative settings from bariatric surgery patients with different pneumoperitoneum sets.

Materials and Methods: Patients aged 25-75 y.o. with BMI ≥ 35 , who underwent laparoscopic bariatric surgery ($n=68$) were divided on two groups: group 1 ($n=43$) underwent bariatric surgery with standard pneumoperitoneum pressure presets (12-15mmHg); group 2 ($n=25$) underwent bariatric surgery with higher than standard pneumoperitoneum pressure presets (≥ 16 mmHg) due to visualization problems. Mean duration of surgical intervention was 60-80 min; duration of pneumoperitoneum was 45-60 min. LPTEG data were collected on 30 minute of surgical procedure.

Results and Discussion: Blood coagulation constants checked by LPTEG were: Intensity of contact coagulation (ICC), Intensity of coagulation drive (ICD), clot maximum density (MA) and fibrinolytic activity - Index of retraction and clot lysis (IRCL). We received slight increase of all measurements in group 1: ICC by 21.01%, ICD by 34.57%, MA by 44.11%, IRCL by 74.38% above the norm; in group 2 - significant increase in all the measurements: ICC by 38.71%, ICD by 69.03%, MA by 98.93%, IRCL by 118.73% above the norm.

Conclusions: Higher pneumoperitoneum pressure presets significantly affecting LPTEG data in comparison to standard in intraoperative setting; this may increase intra- and postoperative VTE risk. Further studies are needed to create a VTE prevention roadmap for cases, when high intraperitoneal pressure required.

Perioperative Medicine

13AP01-1

Preoperative coagulation tests are we using the resources appropriately?

Desai N.¹, Wales J.¹

¹Golden Jubilee National Hospital - Clydebank (United Kingdom)

Background and Goal of Study: In April 2016, we conducted an audit to identify areas of improvement in our clinic.

Our Goal was:

1. To reduce the unnecessary coagulation tests in pre-operative clinic patients for Elective Arthroplasty.
2. To educate the pre-operative nursing staff about appropriateness and interpretation of coagulation tests.
3. To reduce the variation of practice which can lead to patient safety issues?

Following this audit & review of the evidence, our unit decided to limit the use of routine coagulation tests and robust processes were introduced. The current audit aimed to identify appropriateness of our screening and reduction in the waste which is in keeping with the policies of our demand optimisation group (3).

Materials and Methods: We looked at the number of coagulation tests done every month from April 2016 to October 2018 along with the indications.

Results and Discussion: Since April 2016, number of monthly tests has been dropped significantly from 24%-4%. Previously, indications of the coagulation tests were unknown, patient on anti-platelets/ anticoagulants, with alcohol excess, liver disease. The main indication now is: Patients on Warfarin, being pre-assessed the day before the operation. It is recognised that inherited coagulation defects are rare & indiscriminate screening by routine coagulation testing will only very rarely identify previously undetected problems (1). Additionally, the British Committee for Standards in Haematology (BCSH) has shown poor positive predictive values for bleeding with an abnormal coagulation test, whereas peri-operative bleeding rates were similar in patients with and without abnormal coagulation tests (2).

Conclusions: Although, the overall number of coagulation tests has been drastically reduced, we still need regular review of our practice. Regular training of the auxiliary staff about coagulation tests, efficient use of resources and improvement in communication within the team is a key to success.

References:

1. van Veen JJ, Spahn DR and Makris M. Routine preoperative coagulation tests: an outdated practice? *BJA* 2011; 106 (1): 1 – 3
2. Chee YL et al. Guidelines on the assessment of bleeding risk prior to surgery or invasive procedures. *British Committee for Standards in Haematology* 2008; 140 (5): 496 - 5042.
3. Demand optimisation in Diagnostics. *Scottish Government*. 22nd February 2017

13AP01-2

Pre-Commercial Procurement Development in the Perioperative Period. Empowering Patients by Professional Stress Avoidance and Recovery Services” (STARS).

Rodriguez A.¹, Hernandez C.², Böhre W.³, Giampieri M.⁴, Muñoz I.⁵ STARS Consortium

¹Corporació Sanitària Parc Tauli - Sabadell (Spain), ²Hospital Sant Joan de Deu - Esplugues de Llobregat (Spain), ³Maastricht University Medical Centre - Maastricht (Netherlands), ⁴Istituto Nazionale di Riposo e Cura degli Anziani (INRCA) - Ancona (Italy), ⁵Hospital Reina Sofia - Cordoba (Spain)

Background and Goal of Study: The Horizon 2020 project named “Empowering Patients by Professional Stress Avoidance and Recovery Services” (STARS, website: <https://stars-pcp.eu/>), challenge the industry to develop new personalised eHealth solutions in order to reduce stress related to healthcare procedures. Pre-Commercial Procurement (PCP) is the procurement of research and development of new innovative solutions before they are commercially available.

Materials and Methods: Coordinated by the Maastricht University, a Consortium of five academic Hospitals uses the European Commission's (EC) PCP contractual scheme to challenge and stimulate European industry to design and develop new and alternative resilient support tools, to be applied in the field of patients, planned for surgery, with the aim of reducing stress and anxiety as well as improving the health condition of the patient during the complete care path. The project duration will be 48 months. The preparatory phase (Ph) 0 consisted in the need assessment, uncovered functionalities, prior information notice and open market consultation. Currently we are at the call for tender process, under review by the EC. PCP