by 26.01 ± 7.21%, ICD by 39.67 ± 13.57%, MA by 64.07 ± 21.81%, IRCL by 76.88 ± 42.97% above the norm.
Conclusion: The present study demonstrates changes in LPTEG data due to water deprivation, which leads to the dynamic stress state of haemocoagulation system. It can be avoided by the optimization of pre-operative patient's fluid intake. Further studies should be conducted to create an optimal thromboprophylaxis treatment regimen in case of different pre-operative fasting tactics.

5981

Coagulation parameters associated with fibrinogen concentrate and cryoprecipitate for treating bleeding patients in Pseudomyxoma Peritonei surgery: results from the prospective, randomised, controlled Phase 2 FORMA-05 study

Roy A.[1], Sargant N.[1], Solomon C.[2], Kruzkhova I.[2], Knaub S.[2], Mohamed F.[1]
[1]Basingstoke and North Hampshire Hospital - Hampshire (United Kingdom), [2]Octapharma AG - Lachen (Switzerland)

Background and Goal of Study: Cytoreductive surgery (CRS) with hyperthermic intraperitoneal chemotherapy for pseudomyxoma peritonei (PMP) can be associated with excessive bleeding and acquired fibrinogen deficiency. Maintaining adequate levels of coagulation proteins, including plasma fibrinogen concentration, during CRS helps control haemostasis. FORMA-05 compared efficacy and safety of human fibrinogen concentrate (HFC) vs cryoprecipitate for bleeding patients with acquired fibrinogen deficiency undergoing CRS for PMP. This sub-analysis explores the patient coagulation profiles intraoperatively and postoperatively.
Materials and Methods: FORMA-05 was a single-centre, prospective, randomised, controlled Phase 2 study. Patients undergoing PMP surgery with predicted intraoperative blood loss ≥2 L received either HFC (4 g) or cryoprecipitate (2 pools of 5 units, approximately 4.0–4.6g fibrinogen), repeated as needed. Plasma fibrinogen concentration (measured using Clauss assay) and FIBTEM A20 were measured hourly intraoperatively, while Factor (F) XIII, FVIII, von Willebrand Factor (VWF) levels and endogenous thrombin potential (ETP) were measured every two hours. Post-surgery, all parameters were measured at 6, 12, 24, and 28 hours, and 10 days.
Results and Discussion: The full analysis included 45 patients on either HFC (n=22) or cryoprecipitate (n=23). The intraoperative and postoperative changes in ETP, FXIII, FVIII and VWF are shown in Table 1. For FIBTEM A20 (intraoperatively) and fibrinogen concentration (intraoperatively and postoperatively), the mean numerical values appeared higher with HFC than cryoprecipitate. Activated partial thromboplastin time, prothrombin time and platelet count were maintained throughout surgery in both treatment groups.

Parameter	Treatment group	Baseline Mean (SD)	Intra-operative 2h after surgery start, Mean (SD)	Intra-operative 6h after surgery start, Mean (SD)	End-of-surgery Mean, (SD)	2 days after end of surgery, Mean (SD)	10 days after end of surgery, Mean (SD)
Endogenous thrombin potential (nmol/L/min)	HFC	**1514.5** (430.6)	**1673.5** (340.1)	**1310.7** (171.2)	**1225.4** (220.7)	**1263.44** (176.9)	**1426.16** (260.4)
	Cryoprecipitate	**1639.1** (339.1)	**1690.2** (320.2)	**1260.7** (342.2)	**1346.4** (243.6)	**1385.6** (301.6)	**1357.0** (349.5)
Factor XIII (IU/dL)	HFC	**121.86** (27.32)	**80.09** (27.60)	**53.31** (16.16)	**55.28** (22.28)	**48.05** (16.86)	**65.54** (18.58)
	Cryoprecipitate	**115.55** (29.52)	**71.63** (23.63)	**60.27** (15.26)	**62.97** (13.42)	**50.60** (13.44)	**65.00** (14.31)
Factor VIII (IU/dL)	HFC	**152.21** (53.61)	**155.50** (90.60)	**130.70** (50.14)	**121.89** (54.50)	**278.84** (57.74)	**313.88** (84.16)
	Cryoprecipitate	**136.73** (40.90)	**123.61** (50.68)	**120.63** (48.36)	**116.99** (39.50)	**242.78** (54.59)	**331.19** (102.22)
Von Willebrand Factor Antigen (IU/dL)	HFC	**144.43** (65.58)	**144.07** (61.05)	**145.01** (50.99)	**138.52** (54.51)	**253.97** (59.91)	**320.41** (88.32)
	Cryoprecipitate	**140.95** (49.59)	**137.56** (52.21)	**167.56** (52.61)	**174.21** (56.23)	**260.46** (72.54)	**301.54** (92.71)

Conclusion: The FORMA-05 coagulation parameters analyses showed broad overlaps between HFC and cryoprecipitate, with satisfactory maintenance of the clot quality parameters, FXIII concentrations and thrombin generation parameters in both treatment groups.

5929

Early administration of tranexamic acid in hip fracture reduces transfusion requirements

Larranaga L.[1], Martinez S.[1], Arroyo R.[1], Vallés J.[1], Robles M.[1], Álvarez J.[1]
[1]Parc de Salut Mar - Barcelona (Spain)

Background and Goal of Study: In hip fracture, blood loss occurs as a consequence of both the fracture and the surgery. Red blood cell (RBC) transfusion is frequent, but secondary effects and risks have to be assumed. Lastly, tranexamic acid (TXA) has been recommended as a efficient therapy to reduce blood transfusions during surgery. On the other hand, a big part of the bleeding has the origin in the fracture itself. The goal of this study is to evaluate the effect of TXA early administration at the diagnosis of femur fracture over the transfusion requirements.
Materials and Methods: In a double blind prospective study, the patients with hip fracture were randomly assigned to receive TXA (iv, 1g) or placebo at the hospital admission. Demographic parameters, type of fracture, hemoglobin changes and transfusion requirements were register from admission until the fourth postoperative day. Estimation of bleeding from variation of hemoglobin and anthropometric parameters was calculated. Thromboembolic events were also registered. T-test was used for quantitative variables and Chi-square test for qualitative variables.
Results and Discussion: After a year of recruitment, a preliminary analysis of results was made. Sixty-five valid cases were included: 32 patients treated with TXA and 33 with placebo. Groups were similar in sex, age, body mass index, proportion of intracapsular/extracapsular fractures and preoperative hemoglobin.

Table 1. Main results	Tranexamic acid (n= 32p)	Control (n=33p)
Transfused patients all period (n)	12	17
RBC transfused all period (n)	23	31
Transfused patients preoperatory (n)	2*	8*
RBC Transfused preoperatory (n)	2*	9*
Estimated preoperatory bleeding mL (m/SD)	404 (368)	496 (419)
Estimated total bleeding mL (m/SD)	1585 (1478)	1975 (1643)

Table 1. *p<0.05(statistical significance).
Conclusion: Early administration of TXA at diagnosis reduces the need of blood transfusion as well as the number of RBC transfused in preoperative period. These are preliminary results, and a greater sample has to be analyzed for definitive conclusions.
Acknowledgements: Sergi Giraldo.

6278

Discrepancy between conventional laboratory tests and thromboelastography (teg) for the management of hemostasis in a septic patient: a case report

González Del Pozo I.[1], Vullo A.[1], Martín Oropesa R.[1], Ramos Cerro S.[1], Diaz Viudes A.[1], Navarro Suay R.[1]
[1]Hospital Central de la Defensa Gomez Ulla - Madrid (Spain)

Background: Thromboelastography (TEG) is a viscoelastic hemostatic assay that measures the global viscoelastic properties of whole blood clot formation, showing a functional perspective on the entire coagulation process. The use of TEG has been evaluated for cardiac surgery and the emergency control of bleeding after trauma and during postpartum haemorrhage (1). We report a case of a patient with sepsis who presents alterations of INR with TEG within normalization.
Case Report: A 34-year-old patient was diagnosed with xanthogranulomatous pyelonephritis that conditioned a chronic sepsis and was scheduled for nephrectomy surgery. In the preoperative evaluation, anemia of chronic disorders (non-iron deficiency) was observed with baseline hemoglobin 9 g/dL and an INR of 1.57 that did not improve with vitamin K, so fresh frozen plasma (FFP) was prescribed 10 ml/kg before the start of the intervention. After transfusion of FFP, an INR of 1.5 was maintained, so a TEG (ROTEM® delta, Werfen) was performed in which we did not find alterations in the INTEM, EXTEM, FIBTEM and APTEM that suggested a prohemorrhagic state. The intervention was carried out with an intraoperative bleeding of 400mL aproximately, hemodynamic stability and transfusion of two red blood cell concentrates with hemoglobin of 8.6 g/dL at the end. In the immediate postoperative period, the alteration of the INR was maintained without alteration of the TEG or bleeding complications.
Discussion: The agreement between conventional laboratory tests, such as INR, and TEG is poor and it remains uncertain what type of coagulation test best reflects the risk of intraoperative bleeding (2). Apart from the use of TEG for cardiac surgery, bleeding after trauma and postpartum hemorrhage, it can be used in situations where we need additional information on the coagulation status of our patients.
References: