Conclusions: The measures taken are considered effective for enveloped viruses such as HIV, HBV and HCV and for the non-enveloped viruses HAV and parvovirus B19. In addition, the manufacturing process results in an effective prion reduction.

PP2-2

Combined thrombolysis with intravenous abciximab and intra-arteral alteplase yields high recanalization rate in patients with basilar artery occlusion

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Objectives: Recanalization of the basilar artery is crucial for improved functional outcome. We sought to determine the feasibility and efficacy of combined intravenous (IV) thrombolysis with the glycoprotein IIb/IIIa receptor inhibitor abciximab and intra-arterial (IA) thrombolysis with alteplase (rtPA).

Design and Methods: We prospectively studied patients with acute basilar artery occlusion on CT angiography (CTA) within 24 hours from symptom-onset. We treated patients with combined IV abciximab (0.25mg/kg bolus, followed by 0.125 µg/kg/min over 12 hours) followed by IA rtPA (up to 40mg or until recanalization), Primary outcome measure was complete or partial recanalization according to TIMI 2 to 3 flow grades on digital subtraction angiography (DSA). Secondary outcome measures were favourable functional outcome (modified Rankin Scale [mRS] score ≤ 3) and mortality at 90 days.

Results: We treated 20 patients: mean age 62±13 years, median baseline National Institutes of Health Stroke Scale (NIHSS) score 25.5, Glasgow Coma Scale (GCS) score 7, mean onset-to-treatment time 8.7±6.6 hours. We achieved partial or complete recanalization in 16/20 patients (80%). At 90 days, 320 patients (15%) had a favourable functional outcome and 11/20 patients (55%) were deceased. A II 3 patients with a favourable outcome had complete (n=2) or partial (n=1) recanalization of the basilar artery.

Conclusions: Combined thrombolysis with IV abciximab and IA rtPA was feasible and resulted in a high recanalization rate. However, functional outcomes in our study were poor, potentially due to late initiation of treatment. Recanalization of the basilar artery was essential for a favourable functional outcome.

PP2-3

Comparison of plasmin generation and internal fibrinolysis in two groups of women suffering spontaneous abortions related or not to the antiphospholipid syndrome

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A nosophilipid syndrome (SA P) can be the cause of fetal wastage due to the presence of unusual antibodies directed to proteins associated to anionic phospholipids. The aim of the present work was to compare the fibrinolysis process in a small group of women positive and negative for SA P.

Design and Method: Patients with SA P+ (n=12) were selected according to the revised Sapporo Criteria (2006), a commercial L.A. plasma was included. The SA P- patients (n=6) had spontaneous abortions of unknown etiology. The control group (n=12) was similar in age, fibrinogen concentration and body mass index to the patients groups, and was selected from the staff of our department. Fibrin polymerization and internal fibrinolysis was followed by turbidity. Plasmin generation was performed by chromogenic substrate S-2251.

Results: Characteristics of the SA P+ group: The SA P+ group had 1 patient positive for anti-β2-GPI, 4 patients with anti-β2-GPI and aCL, and 11 with aCL. Polymerization, fibrinolysis and plasmin generation: The fibrin polymerization and internal fibrinolysis process was similar between the patients groups and controls Only the commercial L.A. had a prolonged lag time (+ 25 sec), increased final turbidity (+ 0.11) and increased rate of clot dissolution (+ 292 sec) compared to control. Plasmin formation was significantly increased (p<0.05) in the SA P+ group.

Conclusions: The number of subjects studied in the present work limits solid conclusions. However, the fibrin formation and clot dissolution of the patients studied in the present work was normal but different in L A.

PP2-4

Installation and implementation of a web-based data-acquisition system for evaluation of Fibrinogen-concentrate in the therapy of acquired perioperative coagulation disturbances

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Objectives: Severe traumatic or perioperative bleeding necessitates acute fluid therapy which has been shown to cause dilutional coagulopathy. The first compo-

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nent to hereby be critically reduced is often fibrinogen. Despite that fibrinogen-concentrate has a valid allowance for the therapy of hereditary and acquired fibrinogen deficiency, its safeness and efficacy in the therapy of bleeding-induced coagulopathy has never been evaluated in controlled clinical trials. In this patient collective, prospective intervention studies are limited due to the unpredictability of bleeding occurrences. A bove that, an establishment of a placebo group is ethi-

cally highly problematic.

**Methods:** A n improvement of the currently available data on the safeness and efficiency of fibrinogen-concentrate during perioperative coagulation disturbances should be achieved by the construction of a web-based, retrospective case collec-
tion-system, in which completed therapies with fibrinogen-concentrate should be documented.

**Results:** For a short time, our case-collection system is available under www.fibrinogen-netzwerk.de. Data-collection occurs password-protected after online registration and verification by the administrators. Only routinely acquired, anonymised data such as the cause and kinetic of the bleeding event, coagulation parameters before and after therapy, the kind of coagulation therapy, clinical effects of the therapy, adverse events as well as potentially occurring thrombo-embolic complications are recorded. The self-explaining and intuitively operating menu navigation accounts for a shortest possible expenditure of time.

**Conclusions:** By means of the web-based data-acquisition system, clinics of all spe-
cialities can participate. This should generate high case numbers in short time with relatively low logistical and financial efforts in order to derive statistically valid conclusions.

**PP2-5**

**Validation of the Auto-Dimer® test on BCS® / BCS® XP Analyzers**

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**Background and Aims:** AutoDimer® (Trinity Biotech, Ireland) is a rapid fully automated, latex-enhanced turbidimetric test for the quantitative determination of cross-linked fibrin degradation products (D-Dimer) in human plasma. Objective of this study was to validate its use on non Trinity Biotech analyzers, and to verify safety and efficacy of the assay in blood samples in patients with suspected deep venous thrombosis (DVT).

**Methods:** The validation procedure was performed according to NCCCLS guidelines. Basic performance characteristics of the AutoDimer® was measured on two differ-
tent analyzers (Siemens BCS® and BCS® XP), comparing results from clinical and healthy samples with those obtained using a comparable reagent (Siemens D-Dimer Plus).

**Results:** Within-run and total imprecision of AutoDimer® revealed exhibited low impreci-
son (CV 0.7–7.5% and 1.9–8.2%, respectively) for both low and high levels of quality control. The correlation between AutoDimer® and D-Dimer Plus was good (r > 0.89). A uutoDimer® levels in patients with DVT were significantly higher (BCS: 1642 µg/l; BCS-XP:1884 µg/l) than those from the D-Dimer Plus (BCS: 526 µg/l; BCS-XP: 592 µg/l). A uracy was good to excellent, with variation coefficients < 16.42 µg/l; BCS-XP:1642 µg/l) than those from the D-Dimer Plus (BCS: 526 µg/l; BCS-XP: 592 µg/l) was better than that from the AutoDimer® otherwise. A uutoDimer® was shown to be unsusceptible to interferences (haemoglobin, bilirubin, lipids, and heparin).

**Conclusions:** The AutoDimer® assay gives low imprecision, highly accuracy, sen-
sitivities and insusceptibility to interfering substances. Compared to the D-Dimer Plus, AutoDimer® showed a better separation between healthy and DVT patients by providing a significantly higher sensitivity.

**PP2-6**

**Polymorphonuclear leucocyte elastase (ELP) and bacterial proteases degrade fibrinogen in severe bacterial infections.**

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**Objectives:** Elastase and bacterial proteases play an important role in the course and prognosis of severe bacterial infections. We therefore measured the ELP-
specific fibrinopeptide FbFB (30–43) in 25 patients and correlated the findings with other activation parameters and platelet count. We also tested the fibrinolytic activity of cell lysates of different bacterial strains, often found in septicaemia.

**Methods:** FbFB(30-43) was determined by a radio immune assay according to Wallin et al. (Saldeen et al., normal 400 pmol/l). ELP-a1AT nitrinopeptin (AT) and Throm-
bias-A nitrothrombin (TAT) complexes were determined by ELISA techniques. The fibrinolytic activity of cell lysates of different bacterial strains was measured with fibrin plates (A Strup).

**Results:** In 25 patients (group 1) with septicaemia the mean initial value of FbFB was 3650 pmol/l and 1063 after recovery; the corresponding values in a group of 9 patients (group 2) with lethal course were 1937 and 2137, respectively. There was a good correlation with platelet count; 53 and 270 G/l (group 1) and 37 and 38 G/l (group 2), whereas TAT and ELP-a1AT complexes returned to normal in both groups in the course of disease. Bacterial strains exhibited different high fibrinolytic activities which only could be reduced by a2-
macroglobulin.

**Conclusion:** FbFB and ELP-a1AT are highly elevated in the initial phase of se-
vere bacterial infections as sign of in vivo protoxylis by ELP. FbFB stays patho-
logic in lethal outcome though ELP-a1AT has returned to normal. This shows that in these states elastase activity must still be present and cannot be inactivated by a1AT.