

though unusual, septic shock in a pregnant woman is another cause and have high mortality rates.

**Methods.** A 24 year-old woman and 18 weeks pregnant went to the emergency room for abdominal discomfort and fever up to 39°C associated with hypotension (80/50 mmHg) and tachycardia (110 rpm), fluid therapy was initiated and amoxicillin-clavulanic acid was administered after taking blood cultures. With the diagnosis of acute cholecystitis she underwent an emergency surgery.

The laparoscopic cholecystectomy lasted 1.5 hours, with a marked hemodynamic instability which consisted on tachycardia and hypotension with partial response to fluid therapy and bolus of phenylephrine. No surgical complications were present.

**Results.** In critical care unit the antibiotic therapy was modified to meropenem. The hypotension and tachycardia improved with intensive fluid therapy and the infection parameters in laboratory analysis decreased within the next 72 hrs (PCR peak of 312 mg/L and 12200/mm<sup>3</sup> leukocytes) The blood cultures were negative. Twelve days after the intervention she was discharged with ambulatory antibiotic treatment with cefuroxime.

**Conclusion.** The problem with the septic pregnant is that we administer medication mostly found in fetal risk categories B and C of the FDA. Considering the implied morbidity and that we are also treating two patients at a time, risk should be assessed according to the severity of the clinical situation.

#### NWAC-0414

##### Added value of serum-cystatin C in cardiac surgery patients with cpb developing AKI

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**Aims.** AKI is common after cardiac surgery involving CPB. S-cystatin C is a novel early biomarker for AKI awaiting validation in this setting. Goal was to develop a clinical predictive model for AKI and test the added value of s-cystatin C within the first 24 hrs post-op.

**Methods.** 259 patients were enrolled. Patients with severe pre-existing renal insufficiency were excluded (eGFR<15 ml/min). Urine and blood samples were obtained immediately before initiation of CPB, at 3h, 6h, 12h and 24h post-op. Patients were retrospectively divided into 2 groups, AKI (n=84)(32%) and non-AKI (n=175)(68%), based on the AKIN criteria (increase in s-Creat  $\geq$  0.3 mg/dl or  $\geq$  50% compared to baseline within 48h or reduction in Urine output <0.5 ml/kg/h for more than 6h). Statistical analysis to determine which clinical factors were predictive for AKI was performed (diabetes was not

included). Subsequent analysis of the added value of serum-cystatin C to this model.

**Results.** Only duration of CPB, BMI and pre-op eGFR had predictive value in the clinical setting with the following combined AUC scores for AKI: 0.737 (3h post-op), 0.767 (6h post-op), 0.745 (12h post-op) and 0.755 (24h post-op). Addition of s-cystatin C increased the discriminative power at time points pre-op, 3h post-op, 6h post-op and 12h post-op (AUC scores of 0.776, 0.823 and 0.798 resp, all p<0.05 compared to clinical model alone).

**Conclusion.** Addition of s-cystatin C to a predictive clinical model for AKI has significant added value.

#### NWAC-0445

##### Phosphate profiles in renal replacement therapy (RRT) on ICU: citrate CVVH (ciCVVH) vs. Intermittent haemodialysis (IHD)

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**Aims.** CiCVVH has become standard treatment for on ICU with AKI. Though regional citrate anticoagulation for CRRT is recommended as first line therapy in the AKI guideline by the KDIGO Group, IHD is practised in many ICU patients with AKI. Evidence for superiority for one technique over the other remains equivocal. Goal is to compare phosphate profiles of ICU patients requiring RRT, treated with either ciCVVH or IHD.

**Methods.** Over a 10 month period ICU patients were retrospectively studied for cases of AKI requiring RRT. Treatment episodes with ciCVVH (n=33) were compared to those treated with IHD (n=25). A number of patients underwent both ciCVVH and IHD. All phosphate values were analyzed from 12 hrs after initiation of RRT until cessation. Feeding in ICU patients is protocol-based and, though tailored to the diagnosis of AKI, does not differ based on mode of RRT. Phosphate supplementation generally takes place where values drop below 0.8 mmol/L. Substitution fluids used in citrate both in CVVH and IHD are phosphate free.

**Results.** 309 (53%) phosphate values for patients on ciCVVH were analyzed, 275 (47%) for IHD. Phosphate values were significantly different in the 2 groups (mean (ciCVVH)=0,95,SD=0,43; mean (IHD)=1,38,SD=0,52, p<0,05). All values <0.5 mmol/L occurred in the ciCVVH group (n=25). In ciCVVH 88 were < 0.7 mmo/L, in IHD only 12.

**Conclusion.** Phosphate values for patients on ciCVVH are significantly lower than IHD. Dangerous values of hypophosphatemia occur in ciCVVH. Review of phosphate testing and supplementation regimens is warranted. Introduction of substitution fluid for ciCVVH containing phosphate should be considered.