Results During the study period 770 newborns were hospitalized in NICU due to various pathological conditions and 50 newborns have been selected with AKI. As the control group, 50 newborns were taken with comparable associated pathological conditions, but without kidney injury. The calculated prevalence of AKI in neonates was 6.4%. Most of involved newborns in the study in both groups (AKI and non AKI) were born at term (64% and 54%) with predominance of male (68% and 60%). The mortality rate was higher in newborns with AKI than control group (36% vs 24%). In half of newborn infants with AKI predominate severe score level, while in control group predominate median score level (42%). There is a significant difference between the mean score value in neonates with AKI and lethal outcome compared to newborns with AKI without lethal outcome (70.73 ± 18.6 vs. 40.2 ± 16.6).

Conclusion Acute kidney injury is a life threatening condition with still high mortality rate. The severity of the illness of hospitalized newborn infants in NICU is estimated by SNAPPE 2 score. The high score level is associated with the severity of the disease and higher mortality. Appropriate treatment of newborns with severe kidney injury improves the outcome and reduces the mortality of the disease.

Conclusion The severity of the initial neonatal pathology condition the prognosis of the newborns transported which is also influenced by the conditions of the transport.

Introduction Non-catheter-related aortic thrombosis is a rare condition in neonates. It may be life threatening or leads to severe complications. It occurrence requires looking for an underlying congenital prothrombotic condition.

Methods We report a case of a spontaneous aortic thrombosis in a newborn revealing an association of factor V Leiden and hyperhomocysteinemia.

Results A full term male was born by c-section. He presented immediate severe respiratory distress. Echocardiography performed at the second day of life, showed persistent pulmonary hypertension. He required high frequency oscillatory ventilation and inhaled monoxide administration. Initial respiratory stabilization was noted. But at 11 days age, we noted an increase in oxygen requirement; a tachycardia, a hepatomegaly, an edema and femoral pulses were no more detected. Control echocardiography showed a left ventricular dysfunction with an ejection fraction of 30%. The abdominal doppler ultrasound found an extensive thrombosis in infrarenal abdominal aorta. Thrombolytic treatment was not administrated as a subarachnoid hemorrhage was found in the cerebral ultrasound. After 48 hours of mechanical ventilation and inotropic support, hemodynamic and respiratory stabilization was obtained. Control echocardiography at day 14, showed an ejection fraction of 50%. The biological assessment revealed heterozygosis R506Q mutation for the factor V (factor V Leiden) and heterozygosis MTHFR C677T mutation (hyperhomocysteinemia). The aortic thrombosis has been spontaneously lysed and disappeared within 10 months. At 4 years, his physical examination is normal.

Conclusions Till now, there are no clear established guidelines concerning the management of arterial thrombosis. We insist that the blood clotting screen must be systematic and complete to look for association of congenital prothrombotic conditions which would increase the thrombotic risk.