

to 12.480 euro per infant with BSI. The aim of this study was to assess the socioeconomic burden of bloodstream infections in NICU.

Materials and methods

Data were collected prospectively from 591 infants over a 9 month period (June 2009–February 2010) to assess socioeconomic impact of bloodstream infections in a NICU in a maternity hospital in Athens. CDC criteria were used for the diagnosis of bloodstream infection.

Results

During the study 30 (5.1%) from the 591 infants developed 32 (5.4%) bloodstream infections in a total of 7.968 patient days with a total of 930 device days. The incidence density of bloodstream infections was 4/1000 patient days. Laboratory confirmed bloodstream infection incidence was 4.3% (3.3/1000 patient days) and catheter related bloodstream infections incidence was 1.1% with incidence density up to 6.5/1000 catheter days. Umbilical vein catheter related bloodstream infections were the most common accounting for 8.1/1000 umbilical catheter days. Mortality from bloodstream infections was 6.7%. The cost from treating bloodstream infections with antibiotics was 3.975,44 €, which accounted for the 43.8% of the total antibiotic cost. The excess from length of stay came up to 14 days. CNS were the most common pathogen isolated from blood cultures (57.7%).

Conclusions

Our laboratory confirmed BSI incidence was not particularly high in contrary to other perinatologists' studies but catheter related bloodstream infection was high due to CDC percentiles. Protocols for neonatal hygiene and procedures in NICU have to be established in order to avoid bloodstream infections.

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PP-161. A rare cause of diarrhea and abdominal distension in newborns: Cow's milk protein allergy

Ozgur Olukman, Sebnem Calkavur, Nuh Yılmaz,
Demet Can, Fusun Atlihan
Dr. Behçet Uz Children's Hospital, Turkey

Aim

Symptoms related to cow's milk protein allergy (CMPA) can develop even in the first weeks postnatally. Cutaneous, gastrointestinal system (GIS) and respiratory system findings are considered to be at the forefront. Detailed history, physical examination, relation of the symptoms with cow's milk intake, specific IgE, prick test and elimination/challenge test are used in diagnosis. Here, one being premature, two newborn infants are diagnosed as having CMPA based on their GIS symptoms.

Case presentation

Case 1: A 38 weeker, 2470 g, male newborn was admitted to NICU with the diagnosis of congenital ichthyosis. Symmetrical intrauterine growth retardation and ichthyosis findings were remarkable on physical examination. On his 11th day of follow-up, vomiting and subsequent bloody diarrhea attacks were seen during breast milk/formula period and malabsorption tests were normal. Prick test for the cow's milk protein and elimination/provocation test being

positive, CMPA was diagnosed and fully hydrolyzed formula was started. Diarrhea and skin findings being improved, the baby was discharged with recovery on his 39th day. Case 2: A 28 weeker, 1140 g, male newborn was admitted with respiratory distress syndrome to NICU. No pathology was found except respiratory distress findings on his physical examination. Problems regarding his prematurity were resolved with appropriate treatments. However abdominal distension and liquid stool discharge were seen after starting enteral nutrition. Elimination–provocation test and prick test were performed and interpreted in favour of CMPA. The baby was nourished with fully hydrolyzed formula and he was discharged on his 78th day.

Conclusion

In this study it was emphasized that CMPA should be considered in newborns with unexplained vomiting, abdominal distension and diarrhea. As the immune system is immature during newborn period, it's difficult to suggest allergic reactions. Therefore, early diagnosis of CMPA is important for ensuring appropriate growth and development and avoiding unnecessary examinations for differential diagnosis.

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PP-162. Neonatal total parenteral nutrition ascites following umbilical venous catheterization in a preterm newborn

Deniz Hanta^a, Hande Gulcan^a, Birgin Torer^a,
Zeliha Ozdemir^a, Abdulkirim Temiz^b

^aBaskent University, Faculty of Medicine, Department of Pediatrics, Department of Neonatology, Turkey

^bBaskent University, Faculty of Medicine, Department of Pediatric Surgery, Turkey

Aim

Umbilical venous catheterization has become a standard procedure in neonatal intensive care units after the significant increase in the number of preterm newborn. There are several mild to serious complications of umbilical venous catheterization including infection, thrombosis, catheter misplacement, vessel perforation, pericardial effusion, cardiac tamponade and hepatic injury. Neonatal total parenteral nutrition (TPN) ascites is a rare and serious complication of low positioned umbilical vein catheter that is a result of direct injury of the umbilical vein. Here, we present a preterm newborn with total parenteral nutrition ascites secondary to low UVC placement.

Case presentation

A male infant was born at 28 weeks gestational age by caesarean section because of premature labor complicated by HELLP syndrome. The birth weight was 590 g, and Apgar scores were 5 and 7 at 1 and 5 min, respectively. The infant was extubated to nasal continuous positive airway pressure after receiving porcine surfactant (Curo-surf®) because of respiratory distress syndrome. Umbilical arterial and venous catheters were inserted without complication on day 1 of life. At initial placement, the UVC tip was below T10 on abdominal radiograph. On the first day of life, TPN was infused through a 5F umbilical vein catheter. Because of progressive respiratory distress, he was intubated on the 3rd day of life. On day 9 of life, the patient suddenly deteriorated. Significant abdominal distension and marked