

Abstracts

85% had more than 4 risk factors, the most common: NICU admission(100%), central catheter(100%), parenteral nutrition(93%), broad-spectrum ATB use(86%) and IMV(71%). The most frequent associated pathology was catheter-related infection(43%) and necrotizing enterocolitis(22%). No CNS involvement was identified in any case.

Conclusions Systemic prophylaxis with fluconazole has been an effective measure for the reduction of invasive fungal infection in our unit, with a decrease between 40–70%. However, optimization of this strategy is necessary, focusing on those at highest risk (< 1000g and/or ≤27weeks).

1172 A 7-YEARS RETROSPECTIVE STUDY OF NOSOCOMIAL CANDIDA INFECTION IN TERTIALLY NICU

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Background Nosocomial Candida infections (NCI) with dominant *C. albicans* account for 6–18% of lateonset sepsis in NICU, with mortality rate 22–32% and increase health care costs.

Aim Evaluation morbility and mortality rate of neonatal NCI, considering sex, GA, BW, perinatal risk factors, occurrence of other diseases, types of Candida, number of NCI episodes.

Material and Methods The analysis involved 70 newborns (41 boys, 29 girls), 27 ELBW, 20 VLBW, 11 LBW and 12 >2.5 kg, treated within 2002–7 years (4.2% of all), all with flukonazole prophylaxis. Mycological examination was based on Sabouraud medium and using Vitek 2 apparatus.

Results 103 cases of NCI (46 single, 4 double, 7³ 3) were diagnosed between 8 and 117 day of hospitalization (27% £15th, 32% between 16th and 30th, 41% >30th day). Eighteen types of *C.* were isolated (44% in blood), most often albicans (26%), sake (25%) and lusitaniae (18%). The significant dependence was stated between newborns' death and their GA and number of *C.* episodes. Presence of central catheters, MV, bacterial sepsis and ventilator associated pneumonia, total parenteral nutrition and severe RDS, BPD, IVH, NEC were founded as major risk factors for neonatal NCI.

Conclusions

1. Fetal maturity and number of NCI episodes determine the prognosis in newborns infected due to Candida.
2. Risk factors must be evaluated carefully in all sick newborns, because of longer NICU stay and necessity of invasive procedures.

1173 BURKHOLDERIA GLADIOLI SEPSIS IN NEWBORNS

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Background and Aim *Burkholderia gladioli* is a rare cause of bacteraemia and sepsis in patients without predisposing factors like chronic granulomatous disease, cystic fibrosis or immunosuppressive disorders. There is little known about *B. gladioli* infections in newborns. The aim of this study was to evaluate the features of *B. gladioli* infections in newborns.

Methods Clinico-pathologic characteristics, patterns of antimicrobial susceptibility, predisposing factors and outcomes of *B. gladioli* bloodstream infections of newborn patients were analysed retrospectively from 2008 to 2011.

Results During the 3-year study period, *B. gladioli* was isolated from blood cultures of 14 patients (3.7 per 1000 admissions). Five out of 14 (35.7%) cases have a positive blood culture at the time of initial admission. Primary diagnoses of neonates were severe major

congenital anomalies, congenital leukemia, prematurity with respiratory distress syndrome, pneumonia and parapneumonic pleural effusion. Eleven of the 14 patients (78.6%) had undergone at least one invasive procedure and 71.4% of the patients had undergone two or more of invasive procedures. The most susceptible antimicrobial agents were amikacin, gentamicin, imipenem, ciprofloxacin, trimethoprime/sulphametaxazole and ceftriaxone. The overall in-hospital mortality rate was 21.4%. The mortality rate was 7% for *B. gladioli* infections.

Conclusions *B. gladioli* might be a causative microorganism of both early neonatal and nosocomial sepsis in newborns. To our knowledge, this is the first report of *B. gladioli* infection in newborns. Although it seems to have a low pathogenic potential and insidious clinical course in newborns, resistance patterns to antibiotics may be a problem. Mortality was mainly associated with underlying diseases.

1174 SEPSIS AMONG PRETERM INFANTS WITH BIRTH WEIGHT≤750 G: EXPERIENCE OF A MEDICAL CENTER IN NORTHERN TAIWAN

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Background Sepsis is a major cause leading to neonatal mortality and morbidity, particularly for tiny preemies. The purpose of this study aimed to compare outcome between infants with birth weight (BBW)≤750 g having culture-positive sepsis and infants without any positive culture.

Methods This was a retrospective cohort study of infants with BBW≤750 g admitted to Chang Gung Children's Hospital between January 2006 and December 2010. Sepsis was defined as infants had clinical signs and positive blood culture results. Outcome, pathogens and clinical data were collected.

Results 154 infants were enrolled; the gestational age (GA) and BBW were 25.1±1.9 weeks and 639.6±88.5 g (mean±SD), respectively. 46 patients (29.9%) had sepsis and the incidence of sepsis was 5.2 episodes per 1000 patient days. There were 62 episodes of sepsis involving 66 pathogens during the study period. 38 gram-positive pathogens (57.6%), 22 gram-negative pathogens (33.3%) and 6 fungal infection (9.1%) were identified. The major causative pathogens were coagulase negative staphylococcus (n=24), Escherichia coli (n=7) and klebsiella pneumoniae (n=7). Infants received patent ductus arteriosus ligation or had retinopathy of prematurity requiring therapy were associated with developing sepsis thereafter. There was no significant difference in GA, BBW, gender, Apgar scores, intraventricular hemorrhage, bronchopulmonary dysplasia and mortality between sepsis and non-sepsis groups. The mortality rate was 42.9%, and sepsis related mortality accounted for 14.5% of mortality in the current study.

Conclusions One third of infants with BBW≤750 g had sepsis. Based on the finding of identified pathogens, nosocomial infection was still the major cause for sepsis.

1175 PATHOGENS WHICH CAUSING NEONATAL INFECTION IN MECONIUM STAINED AMNIOTIC FLUIDS

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Background Few studies considered that amniotic fluid is sterile but some others mentioned that contains pathogens. Even though not all meconium stained amniotic fluids MSAF develop into