

Conclusions Longer hospital stay prior to PICU admission, steroid use, mechanical ventilation and CVC were associated with becoming MRSA affected.

1572 USUAL MICROBE STRAINS IN A PEDIATRIC INTENSIVE CARE UNIT

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Background and Aim Healthcare-associated infections (HAIs) are an important cause of morbidity and mortality among critically ill children. This retrospective surveillance study was performed to estimate the burden of HAIs in a paediatric intensive care unit of our country. During the 61/2 years study 660 patients were treated in the PICU for >48 hours.

Methods A retrospective study of healthcare associated pneumonia (HAP) blood stream and urinary tract infections is recorded.

Results The crude infection rate were healthcare-associated pneumonia, bloodstream and urinary tract infections and approximately above the two thirds came from microbes isolated from bronchial aspirations. Table 1 positive cultures.

Pseudomonas Aeruginosa was the commonest infected bacterium followed by *Staphylococcus Aureus* and *Klebsiella Pneumoniae* in very low percentage. Table 2 microbes strain.

Abstract 1572 Table 1 Positive cultures

| BAL | 68.75% | 81% |
|--------------|--------|-----|
| BLOODSTREAM | 22,2% | 81% |
| URINE | 9,76% | 81% |
| OTHER SYSTEM | | 19% |

Abstract 1572 Table 2 Microbes strains

| | |
|-------------------------------|-------|
| <i>Pseudomonas Aeruginosa</i> | 39% |
| <i>Staphylococcus Aureus</i> | 5% |
| <i>Klebsiella Pneumoniae</i> | 4,65% |

Conclusions The above data are similar in those in literature and active surveillance is essential to reduce the burden of HAIs and intensive efforts have already began.

1573 SEPSIS AND MULTIPLE ORGAN DYSFUNCTIONS IN OUR PICU

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Background and Aims Multiple organ dysfunction (MODS) may occur during septic disease and it associated with high mortality. The final outcome depends of many factor such as the age, the host response to infection, the site and type of infection, the development of shock, the underlying disease, and the number of failed organs.

The Aim of the study was to determine the frequency of sepsis and MODS in our PICU, define the clinical and laboratory features of affective children and evaluate their outcomes.

Methods A retrospective analysis of children presenting with sepsis and MODS in our PICU between January - December 2011.

Results During the period of study, 478 patients were admitted in our PICU. Sepsis and MODS occurred in 10.9% (n=52) of hospital admissions. Girls were 63% and boys 37%. The overall mortality

was 36.5%. Three children died during the first 24 h after the admission and for the rest the mean hospital stay was 8.4 days.

The most frequent organs involved were respiratory, cardiovascular, hematological and neurological. The organs that were less frequently involved were the gastrointestinal, renal and hepatic organs.

The survival depended on the number of affected systems. When two systems were involved the survival was 84%, three systems 34%, four systems 25% and five or more with no survival.

Conclusions Sepsis and MODS were associated with increased severity of illness.

The mortality rate associated with multiple organ system failure in pediatric patients is high. Mortality increased with increasing number of organ dysfunctions.

1574 HEPATOADRENAL SYNDROME IN EGYPTIAN CHILDREN WITH LIVER CIRRHOSIS WITH AND WITHOUT SEPSIS

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The similarities between septic shock and liver failure led to the proposal of the term hepatoadrenal syndrome. This study aimed to evaluate children with liver cirrhosis for the presence of adrenal insufficiency especially during critical illness. It was designed to evaluate adrenal function for 24 children with liver cirrhosis of various etiologies by measuring basal cortisol level and measuring the peak level after 30 minutes of short low dose ACTH stimulation test. They were categorized to; group 1 included 12 patients with sepsis and group 2 included 12 patients without sepsis. It was found in this study that no one of group1or group 2 had absolute adrenal insufficiency; however 11 patients, 8 (66.6%) of group 1 and 3 patients (25%)of group 2 had relative adrenal insufficiency (RAI) as the increment detected in cortisol level after stimulation was < 9 µgm/dL. Most of patients with RAI (72.7%) were categorized as having Child -Pugh C liver cirrhosis. The presence of ascites, high temperature, high C reactive protein, neutrophilia, high ALT, AST, high total bilirubin, prolonged INR and lower albumin were all risk factors associated with the occurrence of RAI. Survival rate in patients with normal adrenal function (92%) was significantly better than in patients with RAI (27%) (p=0.02). It was concluded from this study that a high incidence of relative adrenal insufficiency was found in children with liver cirrhosis. It was more common in the presence of sepsis, related to the degree of liver cirrhosis and carried a bad prognosis.

1575 LUMBAR PUNCTURE(LP) IN INFANTS AND CHILDREN WITH SUSPECTED MENINGITIS:REGIONAL TRENDS OVER 15 YEARS

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Background and Aims Lumbar puncture (LP) has been long considered a useful tool to assist in the diagnosis of meningitis. We aim to study the trends of successful LPs in an Irish Regional hospital and to further analyse, timing of LP, microbiological and serological positive yield and the potential impact on treatment.

Methods A retrospective analysis of laboratory data of all successful LPs for suspected meningitis among the 0–15 year age group was performed from July 1996 to December 2010 at University Hospital-Limerick. Repeat studies and samples from the Regional Maternity hospital were separately analysed.CSF studies for other conditions were excluded.HIPE data on meningitis admissions and supportive laboratory data were collated. Hospital Audit committee approval was obtained.