

an incidence around 1/100 000/year. We studied the characteristics and outcome in PICU patients with ICH.

**Methods** Children with ICH admitted to PICU during 2000–2010, were retrospectively studied. Clinical information was abstracted via chart review.

**Results** 21 consecutive cases, aged  $5.6 \pm 4.5$  years, 12 girls, were analyzed. 70% of the children presented with vomiting, 55% with seizures, 38% with headache and 9.6% with focal neurological signs. Mean Glasgow Coma Scale (GCS) before intubation was  $7.33 \pm 2.45$ . In 66.6% emergent evacuation of hematoma or hydrocephalus at admission was performed. 23.5% had an arteriovenous malformation (AVM) and 15% of these children underwent embolization for AVM obliteration. Mortality was found 19%. Patients who died had lower GCS ( $4.75 \pm 2.06$  vs.  $7.9 \pm 2.16$ ),  $P < 0.05$ , higher PRISM III-12 (first 12 hours from admission), ( $21.5 \pm 8.1$  vs.  $7.8 \pm 7.7$ ),  $P < 0.005$ , higher PRISM III-24 (next 12 hours), ( $17.2 \pm 8.3$  vs.  $5.2 \pm 5.1$ ),  $P < 0.001$ , and longer  $\alpha$ PTT,  $P < 0.01$  than those who survived. Patients who needed inotropic support the 1st day of PICU stay had 12 times greater mortality than children who didn't need inotropic support. Among survivors 68.7% presented neurologic deficit at PICU discharge. Children with neurologic deficit had lower GCS ( $6.8 \pm 1.6$  vs.  $10 \pm 1.5$ ),  $P < 0.005$  than those without deficit.

**Conclusions** As outcome is dismal in children with ICH and critical illness at presentation, low GCS, high PRISM III and need for inotropic support, prompt diagnosis seems essential to improve prognosis in these children.

#### 811 USEFULNESS OF THE PRISM III SCORE TO PREDICT OUTCOME IN CRITICALLY ILL CHILDREN WITH VAP

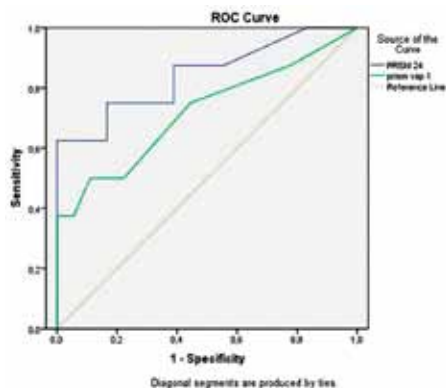
doi:10.1136/archdischild-2012-302724.0811

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**Background and Aims** Ventilator-associated pneumonia (VAP) is associated with increased length of stay and adverse outcomes in PICU patients. In a retrospective study, we examined if PRISM III score at admission or at the day of VAP development could better predict the outcome in patients with VAP.

**Methods** The medical records of PICU patients admitted to a 8-Bed PICU of a tertiary-care hospital from January–December 2011 were reviewed. Clinical data, PRISM III score at admission or at the day of VAP development were recorded. VAP was diagnosed according to CDC criteria.

**Results** 27 patients, mean age  $4.40 \pm 4.23$  years, 59.3% boys, developed VAP. 4 patients presented 2 VAP episodes. Mean PRISM III score at admission was  $10.19 \pm 7.65$ , at the day of first VAP episode  $7.31 \pm 6.94$ , and at the day of 2nd VAP episode  $4.75 \pm 3.60$ . The receiver operator characteristic curve (ROC) analysis showed that PRISM III at admission could better predict mortality in PICU patients with VAP than PRISM III at the day of VAP episode. (Figure 1).



Abstract 811 Figure 1

The area under the curve was found 0.85 (asymptotic 95%CI 0.59 to 1,  $P < 0.01$ ) for PRISM III at admission and 0.72 (95%CI 0.48 to 0.95,  $P = 0.081$ ) for PRISM III at VAP episode.

**Conclusions** PRISM III at admission could better predict mortality in PICU patients with VAP than PRISM III at the day of VAP episode suggesting that VAP may not independently affect mortality.

#### 812 CARDIOPULMONARY ARREST IN PEDIATRIC EMERGENCY CARE AND INTENSIVE CARE: A MULTICENTER STUDY IN TURKEY

doi:10.1136/archdischild-2012-302724.0812

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**Background and Aim** The most cause of cardiopulmonary arrest (CPA) is respiratory system disorders. Usually the survive from CPA is 30% in hospital and under 10% in out of hospital. The aim of this study, the cause of CPA, applications and results of CPA in pediatric ICU and emergency care in Turkey.

**Methods** This study conducted between January 15 and July 15, 2011, multicenter, prospective, observational from Turkey.

**Results** We enrolled 239 children whose CPA developed. Fifty-four percent of all patients were boy and their mean age were  $42.4 \pm 58.1$  months. The causes of CPA were respiratory failure in 49.8%, sepsis in 30.1%, cardiac disease in 21.3% and rhythm disorders in 8.8%. The place of CPA occurred were PICU in 68.6%, services in 18%, out of hospital in 10% and emergency care in 3.3% of patients whose CPA developed. Adrenalin was performed in 221, defibrillation in 16 and automatic external defibrillation in patients. Mean resuscitation time was  $30.7 \pm 23.6$  minutes. Return percent after first resuscitation application was 44.8%. We check to mortality rate after first resuscitation 43.3% in PICU, 41.9% in services, 50% in Emergency Care, 41.7% at out of hospital ( $p = 0.539$ ). The 83% of them were unconsciousness, renal replacement therapy was applied in 16 patients. After first resuscitation, 54.2 patient survived and neurologic sequelae was in 32% of them.

**Conclusion** Mortality and morbidity are higher either hospital and out of hospital CPA, therefore prevention to CPA and well resuscitation applications are very important.

#### 813 PALLIETERBURGH: DEVELOPMENT OF A HIGH DEPENDENCE TRANSITIONAL CARE UNIT

doi:10.1136/archdischild-2012-302724.0813

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**Background** Ongoing advances in paediatric intensive care led to increased survival, with increased morbidity and long-lasting sequelae.