

**PO-0265 NON INVASIVE VENTILATION FOR SEVERE BRONCHIOLITIS**

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**Introduction** Non-invasive ventilation (NIV) is a relatively new ventilatory mode that has been increasingly used in the acute setting over the past 15 years, demonstrating beneficial effects in the paediatric population with different types of respiratory failure.

**Objectives** To examine whether infants with severe bronchiolitis could be managed with non-invasive ventilation (NIV) alone. To study the characteristics, clinical course and outcome of NIV patients.

**Patients and methods** A retrospective analysis was made of infants with severe bronchiolitis in a Paediatric Intensive Care Unit admitted from 01/09/2011 to 31/01/2012 and from 01/09/2012 to 31/02/2013. One thousand and sixty-four infants with severe bronchiolitis were admitted. One thousand and two were invasively ventilated, seventy-two were treated with NIV. We aimed to examine the characteristics, clinical course and outcome for those who received NIV.

**Results** Seventy-two patients, including 6 with apnea, were treated exclusively with NIV. The mean age was 54,2 days  $\pm$  39,1 (8–221). The mean respiratory rate was 61 breaths/min  $\pm$  16,7 (20–104). NIV was delivered by continuous (CPAP) in seven patients, bi-level (BiPAP) positive airway pressure in thirty-four infants and high-flow nasal cannula in thirty-one patients. Twenty-three failed to respond and were invasively ventilated. Risk factors for NIV failure were prematurity and bacterial infection. Duration of hospital stay was shorter in responders. There were no major complications related with NIV.

**Conclusion** This study demonstrates the efficacy of NIV as a form of respiratory support for infants with severe bronchiolitis avoiding ETI in most of the patients. Risk factors for failure were related with immaturity and severe infection.

**PO-0266 SEPTIC SHOCK SECONDARY TO A COMMUNITY ACQUIRED INFECTION: ABOUT 51 CASES**

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**Introduction** Septic shock in children remains one of the main causes of morbidity and mortality worldwide. Although their diagnosis and their management is largely influenced by studies done in adults. There are important considerations relevant for paediatrics.

**Goal** This study had for aim to evaluate epidemiology and outcome of septic shock secondary to a community acquired infection.

**Patients and methods** A retrospective analysis was made of patients admitted between January 2004 and December 2013, in a paediatric department for septic shock secondary to a community-acquired infection. Neonates were excluded from the study.

**Results** Fifty-one cases were included. The average age was 2.7 years (1 month–14 years). The average time between the observation of first disease symptoms and admission was 2.8 days (1–14 days). The average PRISM during the first 24 h was 20.3 (4–

41). Multiple organ failure was present in the majority of cases (96%). Gram-negative bacteria were the predominant pathogens (50%). Respiratory infection is the most common infection site (37.3%). The empiric therapy was a combination of Cefotaxime and Aminoglycoside in 52.9% of cases. Dopamine remains the most prescribed catecholamine (72.5%). Dobutamine and Norepinephrine were used in 62.7% and 31.4% of cases. Mechanical ventilation was needed in 39 patients with an average of 2.8 days (1–16 days). The average length of hospitalisation was 12.6  $\pm$  6.9 days (4–30 days). The mortality was 70.6%.

**Conclusion** Despite significant progress in the understanding and treatment, septic shock continues to be a major health problem in developing countries and around the world.

**PO-0267 SECONDARY TRANSPORT OF CRITICAL PAEDIATRIC PATIENTS: SURVEY IN LOMBARDY**

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**Background** The current health network structure and a lack of a proper filter for pre-hospital care makes every hospital potentially involved into the management of any critical paediatric patient regardless the local experience and organisation.

Any first patient's stabilisation will have to be followed by a secured secondary transport until the hospitalisation at the new facility.

**Objective** Explore the hospitals' organisational set up concerning the secondary transport of paediatric critical care patients.

**Materials and methods** Structured survey delivered to 92 hospitals in Lombardy

**Results** The response rate was 56%, corresponding to 52 health care facilities. In 29 facilities a dedicated transport service for critical care patients does exist but just in one hospital it's specific for paediatric patients and it has dedicated staff. Forty facilities are equipped with a paediatric medical bag and the more involved operator is an anesthesiologist for 39% of cases, followed by the paediatrician in 13% of cases. The nurse participates to the transport in 50% of cases; in 28% of the hospitals a critical care nurses is involved, in 7% of cases the nurse is not specialised and in 4% the nurses is specialised in paediatrics.

**Discussion** The data shows a non homogeneity management of the critical care patient secondary transport.

**Conclusions** It's highly desirable the activation of a secondary transport service with an organisational level compared to the neonatal emergency transport service because the child has its own characteristics as like as the newborn or the adult.

**PO-0268 THE PARENTAL PRESENCE DURING PAEDIATRIC CARDIOPULMONARY RESUSCITATION: EPIDEMIOLOGICAL ANALYSIS**

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**Background** The paediatric cardiopulmonary resuscitation involves high level skills by operators in a setting characterised