PO-0334 LENGTH OF STAY CAN BE PREDICTED BY A CLINICAL SCALE MADE IN EMERGENCY DEPARTMENT IN INFANTS WITH ACUTE BRONCHIOLITIS

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Backgrounds and aims Wood Downes's modified by Ferres score (WDF) was not designed for the bronchiolitis, but its use has been generalised to evaluate the severity. Our aim is to relate the length of stay and the bronchiolitis´s severity at admission, by WDF.

Patient and methods We included the acute bronchiolitis hospitalised during two epidemics (2011–2013). They were classified in mild (MiB; WDF <4), moderated (MB; WDF 4–7) or severe (SB; WDF > 7) according to the scale WDF realised at admission. The mild ones and to the patients without WDF at admission were excluded. The main variable was the length of stay. We registered: age, RSV, sex, previous and during treatment and UCIP's need. Analysis with SPSS 17.0.

Results 208 hospitalised infants were included (mean age of 72,9 days (5–373). Positive RSV in 67,8%. 90,5% were MB and 9,5% SB. Both groups were homogeneous in demographics data and previous admission treatment ($p > 0.05$). The mean WDF at admission was 5,42 (4–10). During the hospitalisation, they received nebulised bronchodilator in 3% hypertonic saline solution (3%SSH) (65%) or 3%SSH (35%). 22% received corticoids and 8,2% antibiotics. Length of stay: 5,3 days (0–46). The MB had an mean length of stay of 4,8 days and the SB of 13,44 ($p = 0.0001$).

Conclusions WDF's scale has demonstrated, in our sample, to be a good predictor of the length of stay in moderate and severe bronchiolitis. The SB had a statistically significant more length of stay than MB.

PO-0335 DOES THE NEBULIZED 3% HYPERTONIC SALINE SOLUTION REDUCE ADMISSIONS TO PICU IN ACUTE BRONCHIOLITIS?

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Background and aims Nebulised 3% hypertonic saline (3%HSS) decreases length of hospitalisation and rate of admission in infants with moderate bronchiolitis. To describe whether treatment with nebulised 3%HSS, with or without bronchodilators in acute moderate bronchiolitis, decreases the rate of admission to PICU compared to nebulised saline (FSS) with bronchodilators.

Material and methods 389 patients with moderate acute bronchiolitis were admitted, 181 were collected retrospectively (group 0: October 2008 to May 2010) and 208 prospectively (group 1: October 2011 to May 2013 patients). Group 0 received treatment with FSS and group 1 received 3%HSS. The PICU admission rate was recorded as the main variable. Secondary variables: overall hospital length of stay (LOS), stay at PICU, need for mechanical ventilation (MV) and its duration. The collected variables were analysed using Chi – square and nonparametric tests.

Results Demographic data and clinical data were similar in both groups ($p > 0.05$): mean age, gender male, RSV positive, corticosteroids or antibiotics use. LOS was longer in group 0 ($p = 0.020$). PICU admission was 17.8% vs 12.5%, $p = 0.146$, stay PICU: 5.91 days vs 3.76 days, $p = 0.859$), VM rate in PICU was 25% vs 24%, $p = 0.931$ and VM duration of PICU was 7.63 days vs 7.17 days.

Conclusions Patients treated with 3%SSH showed the same PICU admission rate and stay. The nebulised 3%SSH does not decrease the PICU admission. Overall hospital LOS was longer in FSS group.

PO-0336 NECROTIZING ENTEROCOLITIS (NEC) AND FOCAL INTESTINAL PERFORATION (FIP) TREATMENT IN A SMALL SINGLE-CENTRE NEONATOLOGY

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Background and aim Necrotizing enterocolitis (NEC) and focal intestinalperforation (FIP) are the mostimportant acquired intestinal diseases in preterm infants with very low birthweight (VLBW). Aim of the study was to evaluate surgical procedures, short-termoutcome and survival of ELBW infants with NEC and FIP in a single-centre study.

Methods ELBW infantsaffected by NEC and FIP and surgically treated in the Neonatology of theUniversity-Hospital of Ferrara from 2000 and 2013 wereretrospectively analysed.

Results Sixteen ELBW infants underwent surgery, 6 because of FIP and 10 for NEC. Three infants in the FIP group were treated with primary laparotomy and 5 withperitoneal drainage (PD). In the NEC group, 4/10 infants were treated with PD,the others with laparotomy. PD was used for unstable patients and was nearly always followed bysecondary laparotomy after stabilisation. In our series just one patient healedwithout further procedures after PD. Five of 16 (12.5%) surgically treated ELBWinfants died. Complications occurred in 3/16 (18.75%) infants: one patientunderwent re-laparotomy for NEC recurrence and 2 were treated for intestinal obstruction after stomaclosure.

PO-0337 WITHDRAWN

PO-0338 EVALUATION OF SUBLINGUAL MICROCIRCULATION IN CRITICALLY ILL CHILDREN USING SIDESTREAM DARK FIELD MICROSCOPY: CORRELATION WITH OTHER ROUTINELY USED VARIABLES

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Background and aims Microcirculation is usually evaluated by indirect means in critically ill children. The aim of this study is to evaluate if there is correlation between microcirculation

parameters using sidestream dark field (SDF) microscopy and macrohaemodynamic parameters, perfusion parameters and the need for some treatments used in critically ill children.
Methods Microcirculation measurements were performed using sublingual SDF microscopy in 18 children between 0.3 and 211.8 months. Microvascular flow index (MFI), Perfused vessel density (PVD), proportion of perfused vessels (PPV%) and heterogeneity index (HI) were determined. Clinical (heart rate, blood pressure, core and skin temperature), laboratory (blood gases, haemoglobin and lactate concentration) and treatment (vasoactive drug dose) variables were recorded simultaneously.
Results 21 measurements were analysed. MFI showed negative correlation with central venous pressure (r=-0.506 p = 0.023), venous pH (r=-0.719 p = 0.001), haemoglobin (r=-0.439 p = 0.045), arterial lactate (r=-0.553 p = 0.011) and adrenaline dose (r=-0.659 p < 0.001), and positive correlation with central venous O2 saturation (r = 0.565 p = 0.012) and systolic arterial pressure (SAP) (r = 0.534 p = 0.022). PPV% showed positive correlation with SAP (r = 0.604 p = 0.006) and core temperature (r = 0.491 p = 0.024) and negative correlation with adrenaline dose (r=-0.585 p = 0.025). HI showed negative correlation with SAP (r=-0.526 p = 0.005) and positive correlation with haemoglobin (r = 0.594 p = 0.005), venous lactate (r = 0.535 p = 0.032) and core temperature (r = 0.491 p = 0.024). PVD showed positive correlation with arterial O2 saturation (r = 0.453 p = 0.045).
Conclusions Microcirculation parameters showed moderate correlation with other macrohaemodynamic and perfusion parameters as well as with the need for some treatments. SDF microscopy may enable evaluation of microcirculation in critically ill children.

PO-0339 SUBLINGUAL MICROCIRCULATION EVALUATION IN THE CRITICALLY ILL PAEDIATRIC PATIENT. IS ITS ROUTINE EVALUATION FEASIBLE?

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Background and aims Microcirculation is usually indirectly evaluated in the critical patient. The aim of the study is to analyse if Sidestream Darkfield (SDF) microscopy allows routine evaluation of sublingual microcirculation.
Methods Prospective observational study. All patients admitted to a PICU during 3 months were included. Sublingual microcirculation was evaluated the first day (T1) and between the second and third day of admission (T2). On patients not evaluated reason was recorded. Comparison between evaluated patients (ME) and those without evaluation (WE) was performed.
Results 105 patients were included (37.1% after cardiac surgery and 30.5% with respiratory disease). Microcirculation was evaluated in 18 patients (17.1%). Microcirculation was not evaluated due to respiratory failure or absence of collaboration in 74.3% at T1 and in 59% at T2, due to the absence of trained staff in 3.8% (T1) and 4.8% (T2), and due to PICU discharge (T2) in 21.9%.

There was no difference between groups in age (ME 3.2 ± 3.5 vs WE 4.8 ± 5.3 years), weight (ME 13.4 ± 8.2 vs WE 19.4 ± 17.7 kg), days with mechanical ventilation (ME 4.1 ± 7.8 vs WE 2.8 ± 8.3), or days with vasoactive drugs (ME 2.2 ± 4.9 vs WE 3 ± 5.6). The incidence of intubation at admission (72.2%) and the length of PICU stay (18.1 ± 17 days) were significantly higher in ME than in WE (15.3% and 5.4 ± 6.9 days) (p < 0.001).
Conclusions Routine evaluation of microcirculation using SDF microscopy in the critical patient is a feasible technique, especially in sicker critically ill children. Its use is hindered by the absence of collaboration and presence of respiratory failure.

PO-0340 CYANIDE POISONING CAUSED BY EATING APRICOT KERNELS: A CASE REPORT

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Background and aim Cases having cyanide poisoning, caused by eating apricot kernels, are, even more rare in children. The present study reports the treatment protocol for a case with cyanide poisoning due to eating apricot kernels.
Method The study involves a male case aged six years, transferred to our emergency clinic from the a public hospital with complaints of tendency to sleep after 1 h and loss of consciousness and convulsion after 3 h caused by eating apricot kernels.
Results When arrived in our clinic, the clinical and laboratory characteristics of the patient were recorded. On physical examination, unconsciousness, significantly decreased muscle tone, no response to painful stimuli, and pale skin were revealed. His treatment with gastric lavage and activated charcoal was started and then transferred to the intensive care unit. He was provided with saline, followed by bicarbonate deficit. Dopamine infusion was performed for circulatory failure. Hydroxycobalamin was applied once and follow-up treatment was carried out. After 72 h of hospitalisation, he was discharged with full-recovery.
Conclusion Sodium nitrite and sodium thiosulfate are the most well known antidotes employed in cyanide poisoning. Hydroxycobalamin and cobalt EDTA have a more rapid onset of effect alone or in combination with these antidotes. Hydroxycobalamin is also employed in our case, followed by supportive treatment. The lack of a specific method for cyanide intoxication, the significant influence of early diagnosis on the clinical course, the consumption of apricot kernel in a wide geography make this fact to be always kept in mind.

PO-0341 NEUTROPHIL CD64 INDEX (CD64IN) IN CEREBROSPINAL FLUID IS A PROMISING MARKER OF BACTERIAL VENTRICULITIS IN CHILDREN WITH EXTERNAL VENTRICULAR DRAINAGE

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Background and aims Bacterial ventriculitis is common in children with temporary external ventricular drains and diagnosis is challenging due to frequent reoperations, blood contamination of cerebrospinal fluid (CSF), presence of chemical ventriculitis and elevation of blood laboratory markers by concomitant bacterial infection.
Methods Prospective, observational study enrolling children with external ventricular drainage at surgical ward and paediatric intensive care unit. CD64in in CSF together with CSF leukocyte