Results For 72 children (31 girls, 41 boys), 91 decision-making meetings were organised. We identified 27.7% (20/72) disagreements or conflicts: 4 simple disagreements, 12 continuing disagreements and 4 conflicts. Five children had acute disease and 15 children had chronic disease. Source of disagreements was continuing LST in 19 cases (families wanted to continue aggressive treatment). In 1 case, the family wanted to stop treatments despite medical opinion (refusal of tracheotomy). Consequences of theses disagreements were continuation of treatments despite LST decisions in 12 cases. For 3 cases a compromise solution was found.
Conclusion Disagreements are frequent in decisions to forgo LST (27,7%) and most of the child undergo treatments that are medically futile.

PO-0319 IS THERE SUFFERING IN CHILDREN FOUR YEARS AFTER A PICU ADMISSION?

[1]W De Weerd, [2]M Brouwer, [1]PJJ Sauer, [2]ELM Mackelberghe. *[1]Pediatric, Beatrix Children's Hospital/University Medical Center Groningen, Groningen, Netherlands; [2]Health Sciences/ Medical Ethics, University Medical Center Groningen, Groningen, Netherlands*

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Background and aims In a previous study on suffering of children during admission to a paediatric intensive care unit (PICU), we found that parents described suffering of their child mainly in relation to physical symptoms. In this study we evaluated if these children still have signs of suffering four years after the PICU admission and if the symptoms of suffering, as perceived by the parents, are different compared to the PICU period.
Methods A structured audio taped interview with 15 parents of children four years after admission to a 20 bed level III PICU of a university teaching hospital to assess whether their child perceived to suffer and to identify perceived aspects of suffering.
Results About 50% of the parents experienced 4 years after PICU admission suffering in their child. Parents of 8 children did not perceive suffering in their child. Parents indicated that the suffering during the PICU admission was due to physical and psychosocial factors. Psychosocial factors were related to the disease causing the admission to the PICU, the treatment and the hospital stay. Four years later the signs of suffering are related to communication, physical and mental retardation and being different from mates.
Conclusions A child's admission to a PICU and its suffering not only cause suffering in the child during admission, but often suffering is still present four years after admission. Caregivers in paediatrics need to be aware of these perceived symptoms. In long-term follow up of critically ill children this phenomena needs attention.

PO-0320 SUFFERING OF PARENTS FOUR YEARS AFTER PICU ADMISSION OF THEIR CHILD

[1]W De Weerd, [2]M Brouwer, [1]PJJ Sauer, [2]ELM Mackelberghe. *[1]Pediatric, Beatrix Children's Hospital/University Medical Center Groningen, Groningen, Netherlands; [2]Health Sciences/ Medical Ethics, University Medical Center Groningen, Groningen, Netherlands*

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Background and aims Admission of a child to a paediatric intensive care unit (PICU) is a very stressful event for the child, but also for the parents. This might not only lead to suffering during admission, but also might have lasting effects. Little is known about the long term effects. In a previous study done during the stay of a child in a PICU we saw that a child's admission to a PICU causes suffering of parents. In this study we evaluated if there are still feelings of suffering in parents four years after PICU admission.
Methods A structured audio taped interview with 15 parents of children four years after admission of the child to a 20 bed level III PICU of a university teaching hospital to assess whether parents still have feelings of suffering and to identify aspects of suffering.
Results Four years after PICU admission about 50% of the parents indicated that they still have feelings of suffering. Parents of 6 children didn't suffer themselves. Parents describe mainly physical and psychosocial causes for the suffering. Reasons for suffering are experiencing changes in the physical and mental situation of the child. Also, the uncertainty of the future, effects on the family and problems in the organisation of healthcare contribute to the suffering.
Conclusions A child's admission to a PICU causes long term suffering in the parents. Caregivers in paediatrics need to be aware of these phenomena and should give attention to these aspects in the follow up support.

PO-0321 NONINVASIVE VENTILATION AND ALVEOLAR RECRUITMENT MANOEUVRE IMPROVE RESPIRATORY FUNCTION DURING INDUCTION OF ANAESTHESIA OF NEWBORN WITH HIGHER LEVER INTRA-ABDOMINAL PRESSURE

[1]D Dmytriiev, [1]K Dmytriiev, [2]K Dmytriieva, [2]O Katilov. *[1]Intensive Care, Vinnitsa National Medical University, Vinnitsa, Ukraine; [2]Radiology, Vinnitsa National Medical University, Vinnitsa, Ukraine*

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Background Morbid obesity predisposes patients to lung collapse and hypoxemia during induction of anaesthesia. The aim of this prospective study was to determine whether noninvasive positive pressure ventilation (NPPV) improves arterial oxygenation and end-expiratory lung volume (EELV) compared with conventional preoxygenation, and whether NPPV followed by early recruitment manoeuvre (RM) after endotracheal intubation (ETI) further improves oxygenation and respiratory function compared with NPPV alone.
Methods 24 patients with higher lever intra-abdominal pressure (15,2 ± 2,4 cm H_2O) were randomised to receive 5 min of either conventional preoxygenation with spontaneous breathing of 100% O_2 (CON), NPPV (pressure support and positive end-expiratory pressure), or NPPV followed by RM (NPPV+RM). Gas exchange was measured in awake patients, at the end of preoxygenation, immediately after ETI, and 5 min after the onset of mechanical ventilation. EELV was measured immediately after ETI and 5 min after mechanical ventilation. The primary endpoint was arterial oxygenation 5 min after the onset of mechanical ventilation. Intra-abdominal pressure (IAP) was controlled by Cron Results are presented as mean ± SD.
Results At the end of preoxygenation, PaO_2 was higher in the NPPV and NPPV+RM groups (382 ± 68 mmHg and 362 ± 71 mmHg, respectively; both $p < 0.001$) compared with the CON group (297 ± 49 mmHg) and remained higher after ETI (234 ± 90 mmHg and 206 ± 94 mmHg, in the NPPV and NPPV+RM groups, respectively; both $p < 0.01$ compared with the CON

group [142 ± 44 mmHg]). After the onset of mechanical ventilation, PaO_2 was90 ± 28 mmHg in the CON group, 118 ± 48 mmHg in the NPPV group ($p = 0.035$ vs. CON group), and 211 ± 59 mmHg in the NPPV+RM group ($p < 0.0001$ vs. NPPV group). After ETI, EELV was higher in the NPPV group compared with the CON group ($p < 0.001$). Compared with NPPV alone, RM further improved gas exchange and EELV (all $p < 0.05$). A significant correlation was found between Pa O_2 obtained 5 min after mechanical ventilation and EELV ($R = 0.41$, $p < 0.001$).

Conclusion NPPV improves oxygenation and EELV in children with higher lever intra-abdominal pressure compared with conventional preoxygenation. NPPV combined with early RM is more effective than NPPV alone at improving respiratory function after ETI.

PO-0322 THE EFFECTIVE DOSE OF SODIUM BICARBONATE IN SEVERE ACUTE DEHYDRATION AND METABOLIC ACIDOSIS DUE TO ACUTE DIARRHOEA IN CHILDREN

M Neamtu, L Dobrota, C Cazan. *Pediatric Clinic CCMRP, Pediatric Clinic Hospital "Lucian Blaga" University of Sibiu, Sibiu, Romania*

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Background Still exist controversies about sodium bicarbonate (SB) effectiveness in metabolic acidosis (MA). The SB dose finally remain at discretion of physician.

Aims Proving SB efficiency in severe acute dehydration (SAD) with MA secondary to acute diarrhoea (AD) in children.

Methods Retrospective study conducted between May–September 2013, in 0–5 years old patients hospitalised for AD with SAD and MA. We chose the propitious age group and season for acute gastrointestinal pathology. We considered SAD loss >10% of body weight and severe MA pH <7,2 and bicarbonate <15 mmol/L. Not included patients with associated pathology. Were studied 43 medical records; blood gases (BG) assessed at admission, 1 h (1H) and 4 h (4H). 31 patients received SB (7–2meq/kg dose – A Group, 24–1 meq/kg – B Group) and 12 not (C Group).

Results In A Group, at admission, 57,14% presented pH <7,2, 100% bicarbonate <15; at 1 H, all presented normal pH and bicarbonate >15; at 4 H, all presented alkalosis. In B Group, at admission, 50% presented severe MA; at 1 H, 25% presented alkalemia, 50% bicarbonate <15; at 4 h, 25% presented alkalosis. In C Group, at admission, 50% presented bicarbonate <15; starting with 1 H, 91,66% presented normal BG.

86,04% presented respiratory compensation (RC), pCO_2 around 20 mmHg. Percentage of patients which developed alkalosis was significantly greater in A than B Group (p 0,004); no significance between C and B Group (p 0,57).

Conclusions In choosing the bicarbonate dose in metabolic acidosis, the physician should consider also the RC, especially at 2 meq/kg dose.

PO-0323 AUDIT ON CARE OF THE FEBRILE CHILD

[1]P Donnelly, [2]L McFetridge. *[1]Paediatrics, Antrim Area Hospital, Dunmurry, UK; [2]Paediatrics, Antrim Area Hospital, Antrim, UK*

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Background and objectives Feverish illness in children is a common reason for hospitalisation. Guidance has been issued by NICE as fever can be a diagnostic challenge. The aim of this audit was to determine if the NICE guideline was being adhered to within the Emergency Department and, if not, where improvement was needed.

Methods This was a retrospective audit reviewing the charts for all children under five years of age attending the Emergency Department within a one month period. These charts were selected using the audit function of the 'Symphony' system. A total of 50 charts were included in the audit. Pyrexia was defined as temperature greater than 37.8

Results 70% were assessed out of hours.

62% had a fever for <72 h.

62% failed to complete a traffic light category for the child.

Only 30% mentioned hydration status.

Only 6% assessed for lymphadenopathy.

Only 6% documented joint examination.

Of those children only reviewed by junior medical staff 44% sought advice from senior colleagues.

66% of children were admitt.ed to the hospital.

70% of those discharged from the Emergency department were given a safety net in terms of when to return to hospital.

98% of children discharged from the Emergency department did not return within the following week.

Conclusion Increased awareness of the NICE guidelines will help improve documentation and ensure that disease specific clinical signs are considered and diagnostic uncertainty is minimised. All cases should be discussed with senior colleagues.

PO-0324 CONDENSED REFERRAL FORMS IMPROVE DATA CAPTURE IN THE NORTHERN IRELAND PAEDIATRIC INTENSIVE CARE UNIT

[1]P Donnelly, [2]J McCabe, [2]A Keaney. *[1]Paediatric Intensive Care Unit, Royal Belfast Hospital for Sick Children, Dunmurry, UK; [2]Paediatric Intensive Care Unit, Royal Belfast Hospital for Sick Children, Belfast, UK*

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Background and aims Communication is an essential component of high quality medical referrals. The aim was to evaluate the completion of intensive care referral forms and to develop a streamlined document to improve data capture as part of the referral process.

Methods The intensive care referral forms were audited over a three month period to assess degree of completion. A streamlined referral document was subsequently devised using the UK PICS 'Example of essential referral information'. A re-audit was performed to assess for improvement in completion of referral data. Data was collected retrospectively and the new streamlined forms were reviewed as per the proforma set out in the initial audit of January–March 2013. The audit standard was that all sections of the referral form should contain information - 100% of details for each referral should be recorded.

Results Improvement was noted in a number of sections of the referral form. Completion of patient details improved by 57%. Capture of referral source details, circulatory status and disability status each improved by 7%. Recording of infection status improved by 8%. Recording of transport details improved by 79%. There was no improvement in recording airway status, breathing status or results of any initial investigations. Advice was recorded as being given prior to transfer in 93% of cases, an improvement of 9%.

Conclusions A concise referral document using UKPICS example has shown an improvement in various areas of data collection. Simplifying the form further may further improve data collection however risks overlooking essential information.