• Number of ET done over a 6 yr period.
• Patients demographics, time of ExT, Indications.
• Number of Babies who have had Inutero ExT.
• Maternal details: Blood group, antibodies.
• The level of bilirubin at which transfusion took place.
• Prior treatment pre-ExT: In-utero Tx, Intravenous Immunoglobulin (IVIG) use; use of albumin infusion.
• The ExT-Related complications: Any complication not present prior to the ET which occurred within 48 hrs after the ET: Defined as follows- platelet count <150, hypocalcaemia, ionised Calcium <0.8, fits, raised INR.

Methods
• Setting: Level 3 NICU.
• Retrospective notes review of patients who underwent ExT.
• Exclusion criteria: Those for which notes were not obtained.

Results
• Total admissions to the NICU over the period = 5,000.
• Number of exchange transfusions done= 15 in 14 patients.
• 0.3% of admissions over the period.
• Table of cases.
• Total number of request made to the Blood transfusion department for blood product for exchange.

Conclusion
• Average ExT/yr in a Level 3 NICU = 2.4/yr.
• ExT is currently being used for a variety of causes.
• There were no complications related to the procedure itself.
• Complications post-ExT were all biochemical (hypocalcaemia- in 13 cases) or haematologic (low platelets 13 cases)
• Use of IVIG: Given pre-Ext to all ABO, Rh cases except 2 and to the Non-immune hydrops secondary to Parvovirus.
• 1st documented case of ExT use in hyperbilirubinaemia secondary to accidental Hyperlipidaemia from TPN-Lipid infusion and Haemolysis with Anaemia post-Ocetenisan wash treatment for MRSA-colonisation treatment in a preterm baby.

PO-0327 IS THE GLASGOW COMA SCALE SCORE IN THE EMERGENCY DEPARTMENT LOWER DURING THE NIGHT?
R Onita, 1 D Kirby, M Eisenhut, 3 Paediatrics, Luton and Dunstable University Hospital NHS Foundation Trust, Luton, UK; 2 Emergency Department, Luton and Dunstable University Hospital NHS Foundation Trust, Luton, UK

10.1136/archdischild-2014-307384.976

Background The body clock may through stimulation of melatonin secretion influence the Glasgow Coma Scale Score. The aim of this study was to investigate whether the time of presentation of children in the emergency department influences Glasgow Coma Scale scores.

Methods Retrospective review of 6649 records of children presenting to an Emergency Department in a District General Hospital from August to December 2012 with comparison of patients with a GCS of <15 seen during daytime (0700 to 1900) and night time (1900 to 0700) with regards to diagnosis, disease severity (Paediatric Early Warning Score), Glasgow Coma Scale Score, age, gender and ethnic group.

Results Out of 4034 patients attending during daytime 25 had a GCS <15 and 34 out of 2592 during night time (p = 0.005).

PO-0328 MONITORING OF SYSTEMIC HAEMODYNAMIC (MSH) IN CHILDREN WITH SEVERE TRAUMA BRAIN INJURY IN PAEDIATRIC INTENSIVE CARE UNIT (PICU)
K Elhalimi, H Bouguetd, MA Negadi, D Boumendil, Z Mentouri. Faculty of Medicine of Oran, CHU, Oran, Algeria

10.1136/archdischild-2014-307384.977

Background and aims SPTBI is frequently associated to acute circulatory failure (hypovolemia, vasoplegia, myocardial depression or tamponed). The haemodynamic systemic management objective in SPTBI is an haemodynamic stability, normal cardiac output, and assessment of blood volume status. In this way MSH has an important role to guide the management (volume expansion, vasopressor or inotrope).

The aim of this study is to improve the interest of systematically integration of MSH for management of cerebral perfusion pressure (CPP).

Method This prospective study was conducted between April 2013 and April 2014. For each patient with cerebral systemic oligohemia, alteration of the CPP, acute circulatory failure, the assessment of the cardiac output, mean artery pressure, blood volume status were obtained by echocardiography, estimated continuous cardiac output (esCCO), Oesophageal doppler, NIBP.

Results on a total of 20 patients with SPTBI, 41 measures were realised.

- Cardiac Index was normal (> 3 l/min/m²) in13 patients with cerebral systemic oligohemia in transcranial doppler (TCD).
- Cardiac Index was abnormal < 3 l/min/m² in 7 patients.

- All patients were treated: o Noradrenaline was introduced in 14 patients with objective of CPP, 2 of them had a profound vasoplegia » DAP < 40 mmHg o Volume expansion in 18 patients » fluid responsiveness based on the respiratory variation aortic flow peak velocity, SV, and inferior vena cava »

Conclusion Assessment of CO, blood volume status, vascular resistance based on a systemic monitoring allows the optimisation of PPC evaluated with TCD.

PO-0329 MULTIMODAL HAEMODYNAMIC MONITORING (HSM) FOR THE MANAGEMENT OF ACUTE CIRCULATORY FAILURE (ACF) IN PAEDIATRIC INTENSIVE CARE UNIT (PICU)
K Elhalimi, H Bouguetd, MA Negadi, D Boumendil, Z Mentouri. Faculty of Medicine of Oran, CHU, Oran, Algeria

10.1136/archdischild-2014-307384.978

Background and aims MSH has an important role to guide the management (volume expansion, vasopressor or inotrope).

The aim of this study is to improve the interest of systematically integration of MSH for management of cerebral perfusion pressure (CPP).

Method This prospective study was conducted between April 2013 and April 2014. For each patient with cerebral systemic oligohemia, alteration of the CPP, acute circulatory failure, the assessment of the cardiac output, mean artery pressure, blood volume status were obtained by echocardiography, estimated continuous cardiac output (esCCO), Oesophageal doppler, NIBP.

Results on a total of 20 patients with SPTBI, 41 measures were realised.

- Cardiac Index was normal (> 3 l/min/m²) in13 patients with cerebral systemic oligohemia in transcranial doppler (TCD).
- Cardiac Index was abnormal < 3 l/min/m² in 7 patients.

- All patients were treated: o Noradrenaline was introduced in 14 patients with objective of CPP, 2 of them had a profound vasoplegia » DAP < 40 mmHg o Volume expansion in 18 patients » fluid responsiveness based on the respiratory variation aortic flow peak velocity, SV, and inferior vena cava »

Conclusion Assessment of CO, blood volume status, vascular resistance based on a systemic monitoring allows the optimisation of PPC evaluated with TCD.
Background and aims Multimodal haemodynamic monitoring has an important role in PICU, because that can aid the intensivist to perform the management of children with acute circulatory failure.

The aim is to improve the interest of haemodynamic management with multimodal parameters to answer to the 3 most commonly asked questions: Complete clinical diagnosis, guide therapeutics, and repeat measures for evaluation.

Methods In this prospective study, between January 2012 and April 2014, the assessment of haemodynamic was obtained progressively by NIBP, TTE, and estimated continuous cardiac output (esCCO), and/or Oesophageal Doppler, and/or pleth variability index (PVI) for each patient with ACF.

Results On a total of 33 patients with ACF, all patients was treated:
- Volume expansion in 31 patients - fluid responsiveness based on the respiratory variation aortic flow peak velocity $\Delta$ Vpeak ao, SV, and inferior vena cava, and/or PVI, FTc, $\Delta$ Vpeak by OD.
  - 29 responder ($\Delta$ SV $\geq$ 10% by TTE, esCCO and/or OD).
  - 2 non responder ($\Delta$ SV $<$ 10%).
- Norepinephrine was introduced in 14 patients (objective MAP and or PPC for SPTBI), 2 of them had a profound vasopla-gia $<$ DAP $<$ 40 mmHg (TTE).
- Dobutamine was introduced in 2 patients with LVEF $<$ 45% (TTE).

Conclusion MHM allows optimisation of systemic haemodynamic: assessment of CO, blood volume status, vascular resistance and contractility.

Abstract PO-0331 Table 1

<table>
<thead>
<tr>
<th>Group</th>
<th>Type A Error</th>
<th>Type C Error</th>
<th>MID Notified</th>
<th>Family Notified</th>
</tr>
</thead>
<tbody>
<tr>
<td>Before Education</td>
<td>46.7%</td>
<td>22.2%</td>
<td>100.0%</td>
<td>50%</td>
</tr>
<tr>
<td>After Education</td>
<td>20.0%</td>
<td>75.0%</td>
<td>91.7%</td>
<td>31%</td>
</tr>
</tbody>
</table>

While the fellows did not participate in the communication of errors to patient/family before education, they did in 60% of the notifications afterwards. The two barriers to communication were “family was not available” (43%) and “error did not cause side effects” (57%).

Conclusion This study demonstrates that despite the effort to increase awareness of medication errors disclosure there was not an improvement in communicating of medication errors to the patient/family. A more systematic and aggressive approach to education on communication may be required to properly address and improve the disclosure of medication errors.

Background Medication administration error is the most frequent error in paediatrics and one of the leading causes of death. Adverse event reporting is critical to improving patient