Introduction Selected young febrile infants with urinary tract infection (UTI) and lower risk for associated bacteremia can be managed as outpatients. Different biomarkers are useful in the management of febrile young infants but their role in this specific population has not been clarified.
Objective To analyze the relationship between blood biomarkers (white blood cell count -WBC-, absolute neutrophil count -ANC-, procalcitonin -PCT- and C-reactive protein -CRP) and the risk of bacteremia in infants under three months with febrile UTI.
Patients and Methods Prospective multicentric study developed in 29 Spanish Paediatric Emergency Departments members of the RISEUP-SPERG (Spanish Pediatric Emergency Research Group), including febrile infants less than three months old diagnosed with UTI between October-2011 and March-2012.
Results We included 715 infants, being 151 (21.1%) diagnosed with UTI. Forty-five (28.6%) were excluded because not having obtained CRP or PCT. Finally, 106 febrile infants under three months diagnosed with UTI were included (5–4.7 %- with associated bacteremia). Values of WBC and ANC were similar in infants with and without bacteremia (14116 leucocytes/mm^3, CI 95% 11178–17053 vs 15630, CI 95% 14221–17039; and 8912 neutrophils/mm^3, CI 95% 4865–12960 vs 8351, CI 95% 7327–9375; respectively). Values of CRP and PCT were significantly lower in patients without bacteremia when compared with those with bacteremia (107.7 mg/L, CI 95% 60.1–155.3; vs 48.8, CI95% 37.9–59.7; and 26.3, CI 95% 6.8–45.9 vs 2.6, CI 95% 1.2–4.0).
Conclusion Procalcitonin and C-reactive protein identify better than classical biomarkers young febrile infants with UTI at higher risk for bacteremia.

1476 REDUCED CONTAMINATION OF BLOOD CULTURES DRAWN IN THE ED. IMPACT OF THE IMPLEMENTATION OF AN EXTRACTION PROTOCOL

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[1]R Velasco, [1]JL Fernandez, [1]N Campo, [1]S Puente, [2]M Dominguez-Gil, [1]M Sanchez, [1]N Diez, [1]L Gonzalez, [1]I Mulero, [3]F Centeno. *[1]Pediatric Emergencies; [2]Microbiology; [3]Pediatrics, Hospital Rio Hortega, Valladolid, Spain*

Introduction Blood culture is the gold standard for the diagnosis of bacteremia. Clinical guidelines consider adequate a contamination rate of less than 3%. Between 2009 and 2010 in our service this rate was 12'56%. Therefore, in February-2011 we started a protocol for blood cultures according to the Scientific Evidence.
Objectives Analyze the impact of implementing a protocol for the extraction of hemocultures on contamination rates.
Methods Retrospective study cohort: Pre-implantation group (A): Patients whom a blood culture was taken from in our Pediatric Emergency Department between March 2009 and April 2010 and post-implantation group (B): Patients with blood culture between April 2011 and March 2012.
Results In the group A 1098 blood cultures were obtained (4'08% of 26874 patients attended) and in group B 535 (2'87% of 18628 patients, p=0.0001). A true pathogen was isolated in 11 samples in cohort A (1'00%, CI95% 0.41–1.59; 0.04% of the population attended from CI 95% 0.02 to 0.06) and in 9 of the group B (1'68%; CI 95% 0.59–2.77; 0'048% of the population attended CI 95% 0.02 to 0.08).

In the group A germs considered contaminants grew in 138 blood cultures (12'56%, CI 95% 10.6–14.52) and in 34 in the B (6'35%, CI95%: 4.28–8.42).
Conclusion The development of a protocol for blood cultures extraction technique according to the Scientific Evidence is useful to reduce sample contamination, but it didn't reach to the standards of quality. Technique protocolization was associated with a significant decrease in number of blood cultures drawn.

1477 PROGNOSTIC VALUE OF INITIAL ARTERIAL LACTATE LEVELS OF ACUTE CARBON MONOXIDE POISONING IN CHILDREN

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S Sahin. *Eskisehir Osmangazi University, Eskisehir, Turkey*

Aim The present study was aimed to compare the prognostic values of lactate and carboxyhemoglobin levels on clinical neurological and cardiac involvement in children with carbon monoxide poisoning.
Methods Totally 77 children aged to 1 month and 17 years who referred to Paediatric Emergency Department (PED) between 1 April 2009 and 30 April 2011 and diagnosed with carbon monoxide intoxication were assessed for age, gender, symptoms, clinical findings, blood gas lactate levels, carboxyhemoglobin levels, morbidity and mortality.
Results There was a significant positive correlation between initial lactate levels in blood gas analysis and early and late complications, neurological and cardiac involvements and morbidity compared to carboxyhemoglobin levels.
Discussion The initial lactate levels have higher prognostic value for cardiac involvement and late neurological sequelae compared to carboxyhemoglobin and it may be helpful for treatment.

1478 ATTENDANCES AT THE CHILDREN'S EMERGENCY DEPARTMENT: AN AUDIT OF TWO YEARS OF ACTIVITY AT A NEW, DEDICATED PAEDIATRIC EMERGENCY DEPARTMENT

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[1,2]R Isba, [2]M Gibb, [1]AG Rowland. *[1]Emergency Department, North Manchester General Hospital, Manchester; [2]Medical School, Lancaster University, Lancaster, UK*

Aim The aim of this audit was to explore patterns of attendance at a new, dedicated, audio-visually separate paediatric emergency department (PED) within the ED of a hospital in the North West of England. The PED was opened in June 2009 following the major restructuring of paediatric services in Manchester.
Methods This was a retrospective audit of paediatric attendances (those aged < 16 years) to the ED of North Manchester General Hospital between June 2009 and June 2011.
Results During the first year there were 26073 attendances to the PED, while in the second there were 24119 (just over a quarter of all attendances to the ED). More than half of all attendees were in the pre-school age group. There were low levels of attendance overnight, and numbers of attendees peaked around 6pm. Mondays were the busiest days (mean attendees 75.4) and Fridays the quietest (mean attendees 64.6). Whilst the average length of stay was just over two hours, this varied depending on the time of arrival. Approximately one in six children was referred to an inpatient specialty for further assessment.
Conclusion These results have implications for those managing EDs that care for children. Knowledge of attendance patterns may enable managers to better plan staffing levels and deployment within an ED, and there are wider implications for the hospital as a whole. By gaining a better understanding of the patterns of attendance it may be possible to predict future patterns (e.g. via mathematical modelling), and to plan resources accordingly.

1479 REFERRAL OF CHILDREN FROM A UK DISTRICT GENERAL HOSPITAL EMERGENCY DEPARTMENT TO PRIMARY CARE GENERAL PRACTITIONERS

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[1]AG Rowland, [1,2]R Isba. *[1]Emergency Department, North Manchester General Hospital, Manchester; [2]Medical School, Lancaster University, Lancaster, UK*

Background This preliminary audit aimed to assess the feasibility of referring children presenting to a UK District General Hospital Emergency Department (ED), seeing 27500 children per year, to their own Primary Care General Practitioner (GP) following an initial assessment in the ED.
Method One hundred and fifty-two patients were assessed by a Consultant in Paediatric Emergency Medicine in the ED during the triage process. Those fulfilling the audit inclusion criteria were referred directly from triage to their own off-site Primary Care GP for a same-day assessment.
Results Only ten patients (6.6%) fulfilled the inclusion criteria for referral to Primary Care and seven (70%) of these were accepted, none of whom were referred back to the hospital acutely by their GP. The median time spent in the ED for the 152 patients assessed in the audit was 1 hour 12 minutes and for the 10 patients referred to Primary Care was 31 minutes.
Conclusions Only a small number of children assessed in the audit were suitable for referral to Primary Care. The assessment and referral process was not a good use of Emergency Department resources.

The absence of a valid and reliable screening tool or early warning score to predict the safe discharge of children from an ED reduced the number of children that could be referred directly to primary care from the ED.

Further multi-centre work is required to evaluate a clinical decision-making framework to enable the accurate assessment of children for their safe discharge or referral from an ED.

1480 CHILD ABUSE DETECTION AT THE EMERGENCY DEPARTMENT USING A NEW PROTOCOL BASED ON PARENTAL CHARACTERISTICS

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H Diderich. *Emergency Department, Medisch Centrum Haaglanden, The Haque, The Netherlands*

Background and Aims The number of children identified as victims of child abuse in the Emergency Department represent only the tip of the iceberg. The "Hague-protocol" takes a new and successful approach to the recognition of child abuse at the E.D.
Methods These new guidelines call for notification to the Reporting Center for Child Abuse and Neglect when an adult patient who is responsible for children at home, visits the E.D. because of either 1) Substance abuse 2) Suicide attempt 3) Domestic violence. A before and after study was done at E.D.'s of five hospitals in an urban region in the Netherlands.
Results In the two years prior to the introduction of the protocol, a total of 4 parents were reported. After the guidelines were issued in 2007 the number of suspected child abuse cases reported to the Reporting Center, based on parental characteristics, rose substantially. A total number of 107 cases were reported in 2008, 149 cases in 2009, and 126 cases in 2010. Results indicate that child abuse was confirmed in the large majority (92%) of the reported cases. In 5% of the cases child abuse could not be confirmed and in 3% of the cases it was concluded that there was no child abuse.
Conclusion The Hague-protocol can substantially improve and increase the detection rate of child abuse cases via the E.D. Parental characteristics can be strong predictors of child abuse, and can be included in E.D.'s guidelines to help identify new cases of child abuse.

1481 TRENDS IN PAEDIATRIC ACUTE ASTHMA MANAGEMENT IN THE REPUBLIC OF IRELAND: A COMPARISON BETWEEN COMMUNITY AND HOSPITAL PRACTICE

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[1,2]J Cronin, [1]J Pollock, [3]T Grant, [1,2]S McCoy, [4]N Breen, [1]S Walsh, [1,2,5]R O'Sullivan. *[1]Paediatric Emergency Research Unit; [2]National Children's Research Centre, Our Lady's Children's Hospital Crumlin; [3]Centre for Support and Training in Analysis and Research (CSTAR); [4]Department of General Practice; [5]Department of Paediatrics, University College Dublin, Dublin, Ireland*

Introduction The prevalence of childhood asthma in Ireland is amongst the highest in the world. We aim to compare the management of this condition by Emergency Physicians (EPs), Paediatricians and community-based General Practitioners (GPs).
Methods A standardised online anonymous survey was conducted of senior EPs, Paediatricians and General Practitioners (GPs) in Ireland. 15% of GPs nationally were chosen using a computerised randomization method. A postal survey was sent to those GPs for whom an email address was not available.
Results We received 344 responses, giving an overall response rate of 52.3% (EP: 67.6%; Paediatricians: 51.3%; GP: 50.6%).

Over 70% of paediatricians and EPs use spacer devices for mild and moderate episodes; 78% of GPs use spacers for mild asthma, however this drops to 38% for moderate episodes. Paediatricians and EPs differed in their choice of first-line intravenous bronchodilators with paediatricians choosing salbutamol (48.3%) most frequently and EPs choosing magnesium (48.3%). Whereas almost all respondents felt that severe asthma should be referred to an ED, over 85% of paediatricians and EPs felt that moderate attacks should be referred compared to 13.7% of GPs. Over 90% of all respondents would welcome a national guideline on the management of acute paediatric asthma exacerbations.
Conclusion This is the first study of its kind internationally to compare management of this important and common condition across the relevant specialties. The results of this survey support the development of a national guideline for acute paediatric asthma management.

1482 PAEDIATRIC TRAUMA TRANSFERS: ARE WE FAST ENOUGH?

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N Cooper, K Parkins, D Grainger. *North West and North UK Paediatric Transport Service, Central Manchester Foundation NHS Trust, Warrington, UK*

Background Children with traumatic brain injury (TBI) require rapid stabilisation and transfer to a paediatric multi-trauma centre (pMTC) within 3 hours (4 hours if rural) of injury (UK guidelines 2010). In our region transfer of children is either by local hospital team or regional paediatric transport service (NWTS started November 2010).
Methods Retrospective 16 month audit patients with TBI transferred into 2 regional pMTCs, identifying severity of injury, areas of delay, length of stay (LOS) on PIC and survival to hospital discharge.
Results 56 patients with TBI were identified. Median time of arrival at pMTC 355 minutes (IQR260–495), 210 minutes for time critical injuries (IQR180–270).
Areas of delay identified:

- Referral time post injury - median 115 minutes (IQR90–172)
- Insertion of invasive lines e.g. arterial or central in 54%
- Neurosurgical Intervention at adult MTC in 4 patients
- Local team vs NWTS= 210 vs 431 minutes

Patients transferred by NWTS were more likely to have severe head injury and multi-trauma. However, median LOS was similar (local team 3.5 (IQR 2–10) vs NWTS 3 (IQR 1–6) days). Overall mortality rate was 6% (national mortality = 10%).
Conclusions Transfer children with TBI within 3–4 hour national target remains challenging. However, regional LOS and mortality rate remain low. This audit highlights the need for early referral, in line with the recent Trauma Network guidelines. The use of