MRI of the underlying CNS in all infants with a midline IH on the scalp, neck or spine.

Association of Paediatric Emergency Medicine

G71 ASSESSING THE IMPACTS FROM THE FIRST YEAR OF ROTAVIRUS VACCINATION IN THE UK

1RD Marlow, 2P Mui, 3L Vipond, 4CL Trotter, 1A Finn. 1Paediatric Emergency Department, Bristol Royal Hospital for Children, Bristol, UK; 2Schools of Clinical Sciences and Cellular and Molecular Medicine, University of Bristol, Bristol, UK; 3Disease Dynamics Unit, University of Cambridge, Cambridge, UK; 4Public Health England – South West, Bristol, UK

Aims The United Kingdom added rotavirus vaccine (Rotarix GlaxoSmithKline) to the national immunisation schedule in July 2013. We have performed two years of active surveillance at our regional children’s hospital to establish the baseline characteristics of disease burden pre-rotavirus vaccine and now report the epidemiological trends one year after vaccine introduction.

Methods During the 2012–2014 rotavirus seasons, children presenting to our regional paediatric emergency department with gastroenteritis symptoms (>2 loose stools and/or >1 episode of forceful vomiting in the last 24 h) had stool virology analysis (real-time PCR), severity assessment (Vesikari score) and clinical outcome recorded. Nosocomial cases were retrospectively identified as patients admitted with a non-gastroenteritis diagnosis (e.g. forceful vomiting in the last 24 h) had stool virology analysis more than 48 h after admission.

Results In comparison to the pre-vaccine seasons, in the first year after vaccine introduction there were 42–47% (p < 0.001) fewer attendances diagnosed with gastroenteritis, a 38–58% (p < 0.001) reduction in gastroenteritis admissions and a total saving of 300–358 bed days occupancy. Overall there was a 73–78% reduction in number of stool samples testing positive for rotavirus. In those under 1 year old there was a 94% reduction in rotavirus positive cases and a 67–70% reduction in those too old to have been vaccinated (1–4 years).

Conclusions In the first year after the introduction of universal vaccination against rotavirus we observed a profound reduction in gastroenteritis presentations and admissions and a fall in overall seasonal workload. Although by early 2014 only those under 1 year old had been vaccinated, there was also a significant herd effect with many fewer cases than expected in older children. Extrapolating these findings to the UK population we estimate secondary healthcare savings in the first year of ≈£4.5 million. Ongoing surveillance will be required to determine the long-term impact of the rotavirus immunisation programme.

G72 SIMULATION TRAINING IN SAFEGUARDING CHILDREN AND ADOLESCENTS: TRAINEES WANT IT, TRAINEES LIKE IT AND WE NEED TO DELIVER IT

D Hall, C de Munter, N Ninis, A Goddard, H Avila. Department of Paediatrics, St Mary’s Hospital, Imperial College Healthcare NHS Trust, London, UK

Aims Simulation is increasingly used in medical education though not traditionally in safeguarding training. We conducted a national survey of 50 paediatric and emergency medicine doctors, all with safeguarding responsibilities, which revealed a gap in training and lack of confidence in managing adolescent safeguarding and unexpected child death. Few had experienced safeguarding training via simulation but when asked their training preferences the majority said their preference would be via simulated scenarios. We designed an innovative course simulating common safeguarding scenarios and reviewed candidates’ perception of change in knowledge and self-confidence in dealing with these difficult situations.

Methods Three safeguarding scenarios were simulated using manikins and actors: a physically abused neglected child, the unexpected death of an infant in a difficult social context and the possible sexual exploitation of a young teenager. Candidates took turns to communicate sensitive safeguarding issues with the actors. A multi-disciplinary team including Detective Inspectors from Project Indigo, Youth Workers from Red Thread, Paediatric Bereavement Team and named doctors for Safeguarding and Child Death participated in each scenario modelling communication skills and leading discussion about legal processes and safeguarding resources. Each scenario was followed by a group debrief aiding reflection and consolidating learning.

Results Pre and post-course questionnaires revealed a significant improvement in confidence in managing these safeguarding scenarios. Candidates’ perception of simulation as an educational tool in safeguarding, thought pre-course to be “effective”, was rated as “very effective” post-course. The course was extremely well received with feedback including “this course was amazing”; “by far the most useful safeguarding course I’ve ever been on” and “an excellent programme with unique practical application of theory”.

Conclusion Simulation is a validated tool in medical education, allowing trainees to practice skills in a safe, supportive environment without the risk of patient harm. By actively experiencing an event, simulation stimulates emotional insight, with debrief aiding reflection to identify strategies to improve future practice. Simulation in safeguarding improves confidence in managing difficult scenarios and trainees clearly want it to become a much larger part of their safeguarding training. We urge other centres to follow our lead and incorporate simulation into their safeguarding training programmes.

REFERENCES
1. Kreibone et al, 2004
2. Moon, 1999
3. Fanning and Gaba, 2007

G73 PAEDIATRIC DIFFICULT AIRWAY EQUIPMENT IN EMERGENCY DEPARTMENTS: A REGIONAL AUDIT

1T Radia, 2S Bernard, V Rainey, K Florman, 2Q Chen, M Jaffer, 1Department of Paediatrics, Guy’s and St Thomas’ NHS Foundation Trust, London, UK; 2School of Clinical Medicine, King’s College London, London, UK

Aims The 4th National Audit Project by the Royal College of Anaesthetists highlighted that difficult intubations account for 9% of all intubations in emergency departments (EDs). It subsequently recommends that all paediatric EDs should have a difficult airway trolley (DAT) dedicated to paediatric use. The 2012 emergency care standard by RCPCH also specified a list of recommended airway equipment in emergency situations. Previous surveys demonstrated a general low availability of a paediatric DAT in anaesthetics departments (16%) and PICU/HDUs.
IN THE AGE OF THE RAPID DIAGNOSTIC TEST, ARE THREE ROUTINE BLOOD FILMS NECESSARY TO EXCLUDE IMPORTED MALARIA IN CHILDREN PRESENTING TO THE EMERGENCY DEPARTMENT?

C Bird, N Jones, S Hartham. Emergency Department, Birmingham Children’s Hospital, Birmingham, UK; 2Blood Sciences Department, Birmingham Children’s Hospital, Birmingham, UK

Abstract G74 Table 1 2 × 2 contingency table for malaria RDT

<table>
<thead>
<tr>
<th>Malaria</th>
<th>No malaria</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>RDT positive</td>
<td>7 (4 P falciparum, 3 P vivax)</td>
<td>2</td>
</tr>
<tr>
<td>RDT negative</td>
<td>0</td>
<td>93</td>
</tr>
<tr>
<td>Total</td>
<td>7</td>
<td>95</td>
</tr>
</tbody>
</table>

Conclusion In this series, a single RDT combined with one film excluded malaria in returning travellers, and this is common practice within the ED and the wider Trust. However, other studies have reported that RDTs and preliminary microscopy can rarely miss infections. A larger study needs to confirm the safety of a single RDT and film.

REFERENCES

THE RAPID DEBRIEF: A TOOL THAT TRANSFORMS LEARNING AND SYSTEM CHANGE

R Puttha, M Yiallourides, R Thalava, A Abdalla, S Yuen, N Moghal. Paediatrics, George Eliot Hospital, Nuneaton, UK; 2Paediatrics, Nottingham University Hospitals, Nottingham, UK; 3Orthopaedics, Tameside General Hospital, Manchester, UK

Aim To test the rapid debrief tool as a way of extracting immediate learning to implement system changes following the care of the critically ill child; overcoming the dispersion of people and memories in the traditional incident reporting cycles.

Method A rapid debrief was tested immediately after the care of a critically ill child was completed by the team. A template was used to collect what improvements were needed technically (resources, skills) as well human factors such as communication and leadership. Action plans were generated by the team. The debrief and action plan was then circulated to all staff and discussed at the weekly service meetings. Outcomes were monitored by the Paediatric Resuscitation Group.

Results A total of 29 rapid debriefs were completed over 12 months, generating 81 action plans, of which 50 have been completed. Many of the actions were completed before the incident forms reached the clinical governance system. 20 related to equipment, 5 to medications, 7 to team issues (communication, leadership), 10 training issues and 11 planning and organisation wide issues. Compared to the year previous to the rapid debrief, clinical Incident reporting now shows a 1.7 times increase of low risk incidence reporting; incidents of moderate or high risk have been reduced by half. Staff feedback has been very positive.

The learning outcomes include the development of safe hand-over tools, improving resuscitation resources and team needs, incorporating human factors into the resuscitation training to build team resilience and an open challenging culture.

Conclusion The rapid debrief has helped improve our care of the critically ill child through the immediate extraction of learning and implementation of improvements. The tool enables faster system change compared to traditional reporting governance systems.