

England. This report has been referred to by Commissioning Groups when reviewing and commissioning services.

The information produced by ChiMat is based on data from the hospital's coding department, who determine the admission reason from discharge letters completed by junior doctors.

We carried out a retrospective audit to review:

- The accuracy of coding
- Medical management of Paediatric Emergency Epilepsy admissions.

Methods We reviewed the medical notes of all patients coded as having a Paediatric Emergency Epilepsy admission during 2011. There were 78 patients during this period, and information was collected using a standardised proforma. Inappropriately coded patients were excluded from analysis in the second part of the audit.

Results 10 of the 78 patients (12.8%) were exclusively under the care of the adult physicians, with age range 16–19 years. Of the other 68 patients, 15 were incorrectly coded (22%).

Review of the medical management in the remaining 53 admissions, showed areas for improvement in medication adherence, patient education and awareness, and community management plans.

Conclusions This study has shown the importance of accurate data coding, as this is used to review the service we provide, highlighting exceptional practice as well as areas which require improvement. Variation in practice and value in healthcare are the current quality indicators which are used, to compare hospitals and clinicians, and to continue the quality improvement cycle. It is therefore in the interest of all to engage with clinical coding to ensure accurate, robust data is being used.

Our audit has led to more streamlined management of patients with epilepsy, including the consideration of more community-based management plans and proposal for a Paediatric Epilepsy Specialist Nurse. There has also been quality improvement effects, including introduction of a weekly epilepsy-related admissions report which is reviewed for accuracy, monthly epilepsy peer-review meeting to review all admissions and challenging cases, importance of accurate coding on discharge letters being emphasised to junior doctors at induction, and introduction of a checklist for management of patients with epilepsy.

G69(P) NARCOLEPSY – AN IMPORTANT BUT RARE PAEDIATRIC DIAGNOSIS

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Aim To present patients investigated for narcolepsy in order to increase awareness of its clinical features.

Methods 5 patients referred with possible narcolepsy to the sleep clinic.

Results

1. 8 year old boy with excessive daytime sleepiness and cataplexy. HLA typing has shown HLA- DQB*06:02. MSLT showed short sleep latency. Awaiting lumbar puncture for CSF analysis of orexin level. Commenced on methylphenidate with good response.
2. 6 year old boy with 4 year history of falling asleep quickly including very short distances in the car, at school, and before finishing meals. HLA typing is positive for DQB1*06–02. Commenced on methylphenidate.

3. 13 year old boy with 5 year history of falling asleep several times a day often missing his bus stop and has recurrent naps in school. Commenced on methylphenidate.
4. 13 year old girl who falls asleep in lessons however related to boredom rather than irresistible desire to fall asleep. Found to be anaemic. Commenced on iron supplementation.
5. 8 year old girl initially presenting with excessive daytime sleepiness with hallucinations on sleeping and waking. She was HLA DQB*06–02 positive suggesting narcolepsy with hypnagogic and hypnopompic hallucinations. MSLT not diagnostic of narcolepsy but had epileptiform changes on EEG. Commenced on clonazepam with improvement in hallucinations.

Conclusion Narcolepsy is an autoimmune neurological disorder characterised by excessive daytime sleepiness associated with cataplexy, hypnagogic/hypnopompic hallucinations and sleep paralysis. This frightening onset of symptoms often occurs in childhood or adolescence with a 10–14 year diagnostic delay. Often multiple misdiagnoses such as hypothyroidism, depression and epilepsy are made along the way. By presenting these patients, the features of narcolepsy are highlighted enabling Paediatricians to consider this as a diagnosis. Better recognition and earlier diagnosis can lead to earlier onset of therapeutic intervention thus leading to a lower impact on academic performance and social development.

G70(P) RADIOLOGICAL INVESTIGATIONS OF MIDLINE INFANTILE HAEMANGIOMAS OVERLYING THE SCALP OR SPINE: 5 YEAR SINGLE CENTRE EXPERIENCE

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Aim To review the outcomes of investigations for midline infantile haemangiomas (IH) overlying the head or spine in a tertiary paediatric dermatology department.

Methods Case notes and radiological results were reviewed retrospectively for all patients with a clinical diagnosis of IH overlying the midline of the scalp, neck or spine seen over the 5 year period October 2009–14.

Results 43 patients were identified (31 girls). The median age at the first specialist clinic appointment was 5 months (range 2–23 months). In 26 patients the IH were located on the scalp, in five on the back of the neck, in four overlying the thoracic spine and in eight overlying the lumbar spine and or sacrum. 24 lesions were more than 5 cm and 19 less than 5 cm in size at the time of the first appointment, 10 of which were plaque-type IH. 18/43 patients had MRI of either the brain or spine following the initial assessment. MRI was normal in 15 patients, including in all lumbosacral lesions. In two cases of plaque-type IH a diagnosis of PHACES syndrome was confirmed. In one child where the IH was a palm-sized lesion over the thoracic spine, MRI showed extension of the IH into the spinal canal, with complete compression of the cord between T4 and T9. The child was neurologically asymptomatic at the first assessment, but the result prompted treatment with propranolol.

Conclusion This retrospective series of midline IH seen over a five year period in a tertiary centre has identified a significant underlying lesion in a child with a thoracic spinal IH. The current literature from experts in the field recommends MRI for lumbosacral lesions. Our internal guidelines will now dictate an

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

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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 testing positive for rotavirus 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 ≈£7.5 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

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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.¹ By actively experiencing an event, simulation stimulates 'emotional insight',² with debrief aiding reflection to identify strategies to improve future practice.³ 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 Kneebone *et al*, 2004
- 2 Moon, 1999
- 3 Fanning and Gaba, 2007

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

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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).¹ It subsequently recommends that all paediatric EDs should have a difficult airway trolley (DAT) dedicated to paediatric use. The 2012 emergency care standard by RCPCH⁴ 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%)² and PICU/HDUs