

Results A total of 22 doctors attended the sessions. Adherence to the overall standards improved from 58 in the 1st session to 72% in the 2nd. An improvement was seen in six standards, compliance maintained in two and a fall in compliance noted in two standards. A further re-audit over a three week period found an improvement in these two deteriorated standards, with an overall adherence of 90%. Feedback from the sessions was very positive with a suggestion for other audits to be carried out in a similar format. A three week audit at another paediatric unit within the same Trust where no similar training sessions were performed found adherence to the standards of 70%.

Conclusion The introduction of a programme which utilised the prescribers themselves enabled a level of engagement and a greater understanding of the standards required. A significant improvement in prescribing was noted over the period of assessment which, following repeated sessions, is expected to be maintained.

G331(P) HAEMOPHILIA: A LOT TO LEARN FROM A NEAR MISS EVENT

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Introduction A two year old girl presented with prolonged bleeding following a fall. A strong family history of haemophilia was ignored during visits to health professionals due to the misconception that female carriers are unaffected! She was extensively investigated and was found to have Factor VIII deficiency which did not respond to Tranexamic acid and Desmopressin. This was discovered three weeks prior to her preoperative assessment for an adenotonsillectomy. Routine pre op checks, which do not always involve clotting and the above misconception, could have affected her severely perioperatively. This case highlights the importance of detailed history taking including family history and remembering that Haemophilia can, and does affect females.

Case report AG was born without complication, at term by forceps delivery. Mother had heavy postpartum bleeding. She developed obstructive sleep apnoea, and adeno-tonsillectomy was planned. Three weeks before her pre-operative assessment she fell, tearing her frenulum. Persistent bleeding led to a paediatric assessment. Initial investigation revealed her haemoglobin was 88, APTT 1.5 and APTT ratio 45 and rest normal. Further investigation revealed low Factor VIIIc levels (36), 72% of expected. Other factors were normal. Detailed history taking revealed a family history of Factor VIII deficiency (maternal grandmother: carrier, maternal aunt: affected). AG received Tranexamic Acid and a Desmopressin infusion, followed by a Factor VIII infusion at the Haematology unit due to persistent bleeding. Communications between ENT haematology is ongoing to carry out a safe surgery.

Conclusion This was a near miss event which will require ongoing care from a consultant haematologist. Clinicians need to be aware that Haemophilia can, and does, affect females. 28% of female carriers of Haemophilia A are known to have Factor VIII levels consistent with mild Haemophilia. This case should raise our awareness about thorough history taking, and updating our knowledge about Haemophilia, to avoid future catastrophes. There are also important implications for her mother. We

recommend checking Factor VIII activity levels in all haemophilia carriers before haemostatic challenge, such as pregnancy.

G332(P) EXCESSIVE DAYTIME SLEEPINESS IN TEENAGERS – COULD IT BE DUE TO IRON DEFICIENCY?

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Introduction Research has shown that restless leg syndrome, restless sleep or insomnia among paediatric population is often related to low iron stores. Dopamine plays a role in neuronal networks including sleep activity. Iron is vital to the brain's dopamine system and therefore iron deficiency is a contributing factor to sleep disorders. 1.9% of children and 2% of adolescents are affected with restless leg syndrome.¹ A 2002 study showed that abnormal iron stores or metabolism may result in restless leg syndrome causing insomnia in teenagers.²

Back ground To assess teenagers presenting with recent onset sleep problems with respect to presenting complaints, RLS (restless leg syndrome) questionnaire, investigations and measuring outcomes using Modified Paediatric Epworth Sleepiness Scale (Ages 6–16), pre and post treatment.

Patients and methods 5 teenagers aged between 14 and 15 years, presenting with excessive day time sleepiness and tiredness referred to sleep clinic in the last 12 months were analysed. They were sent sleep questionnaire prior to clinic visit. They completed the RLS questionnaire in the clinic and the modified paediatric Epworth sleepiness scale. Those found to have Ferritin <50microgram/l were treated with iron supplements for 3 months along with sleep hygiene and dietary advice.

Results 3/5 teenagers had nocturnal leg pains with multiple arousals. The RLS questionnaire was positive for all 5 questions. Epworth sleepiness score was >10. Iron studies showed a mean of 9 mmols/l (10.7–28.6) and ferritin of 9.7 ng/ml (5–204) respectively. Post iron treatment, clinical symptoms and Epworth scoring improved (0–2).

Conclusion Sleep related symptoms in these patients were due to the restless legs. This supports the hypothesis that low iron levels may result in RLS causing sleep disturbances in teenagers. Iron studies including ferritin levels in teenagers is indicated with insomnia, excessive daytime sleepiness of unexplained origin even when anaemia is mild or absent.

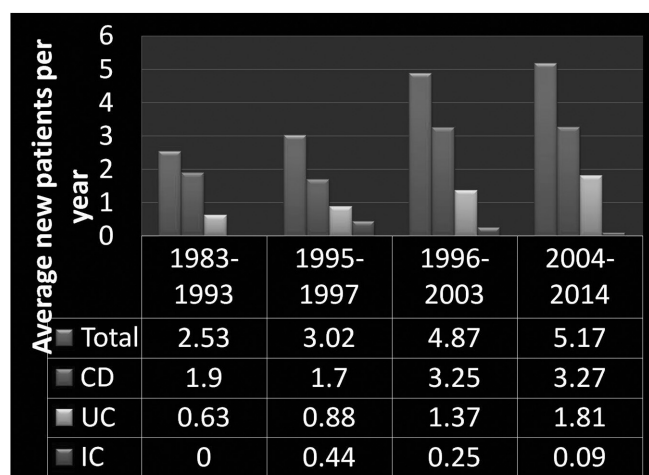
We recommend commencing iron supplementation for patients with ferritin of <50 ng/l along with sleep hygiene and dietary advice.

British Society for Paediatric and Adolescent Rheumatology and British Society of Paediatric Gastroenterology, Hepatology and Nutrition

G353 HAS THE RISING INCIDENCE OF PAEDIATRIC INFLAMMATORY BOWEL DISEASE IN OUR REGION STABILISED?

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Abstract G353 Figure 1

Introduction The incidence of paediatric inflammatory bowel disease (IBD) has risen significantly across Europe in the last 20 years, although our own data had suggested that this had plateaued by 2004. We have now studied the data from the same area over the last decade and compared them with our previous studies (1983–2003).

Methods All cases of IBD <16 years of age residing in a defined location within our region were prospectively recorded from January 2004 to March 2014. The incidence, age, gender and disease type were analysed and compared to our data from 1983–2003 from the same region.

Results See Table 1. Between 2004 and 2014, there were 57 new patients compared to 39 (1996–2003) and 28 (1983–1993). The overall incidence of IBD was 5.9 per 100,000 per year, Crohn's disease (CD) 3.7 per 100,000 per year and Ulcerative colitis (UC) 2.07 per 100,000 per year compared with 5.4 per 100,000 per year for 1996 to 2003. There was no statistically significant difference between the two time periods (*p* value of 0.675). The median age at diagnosis remains at 12 years with a male to female ratio of 1.7:1.

Conclusion The incidence of paediatric IBD in a defined geographical area within our region has remained similar for more than 15 years with a slight increase in the incidence of UC, suggesting that the previous exponential rise in incidence has reached a stable state.

G354 THE ONGOING RAPID AND SIGNIFICANT RISE OF INCIDENT PAEDIATRIC-ONSET INFLAMMATORY BOWEL DISEASE IN SCOTLAND

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Background The worldwide incidence of paediatric-onset inflammatory bowel disease (PIBD) is rising, with Scotland having the highest rate in the UK. Scottish PIBD data over the last 40 years has shown a consistent increase, including a 76% rise over 13 years around the millennium (Henderson *P et al.* IBD 2012;18:999–1005).

Aims The aim of this study was to calculate current PIBD incidence rates in Scotland and to determine if the temporal trend of significant increase has been maintained.

Methods Historical data from 2003–2008 (cohort 1) was compared to prospective, nationwide data of all incident cases diagnosed in paediatric services (under 16 years of age) from 2009–2013 (cohort 2). Age-sex adjusted incidence rates were calculated using population data from the General Registrar's Office for Scotland. Cases were classified as Crohn's disease (CD), ulcerative colitis (UC) or inflammatory bowel disease unclassified (IBDU) and diagnosed according to the Porto criteria. Statistical analysis was performed using Poisson regression.

Results A total of 436 patients were diagnosed with PIBD over six years in cohort 1 (265 CD, 115 UC, 56 IBDU) compared to 478 children over five years in cohort 2 (286 CD, 126 UC, 66 IBDU). Median age at diagnosis in cohort 2 (60% males) was 12.3 years, similar to cohort 1 (58% males) at 11.9 years. The adjusted incidence rate increased from 7.8/100,000/year (95% CI 7.1–8.6) in cohort 1 (2003–2008) to 10.4/100,000/year (95% CI 9.6–11.5) in cohort 2 (2009–2013) (*p* < 0.001). This significant increase was also seen individually for CD (4.7/100,000/year [95% CI 4.2–5.4] compared to 6.3/100,000/year [95% CI 5.6–7.0] [*p* < 0.0001]) and UC (2.1/100,000/year [95% CI 1.7–2.5] compared to 2.7/100,000/year [95% CI 2.3–3.3] [*p* = 0.009]). There was a non-significant increase in IBDU from 1.0/100,000/year (95% CI 0.7, 1.3) in cohort 1 to 1.4/100,000/year (95% CI 1.1, 1.8) in cohort 2 (*p* = 0.07).

Conclusion There continues to be an ongoing rise in incident PIBD (and both CD and UC) in 2009–13 in this national, population-based study compared to recent historical data, with a further significant rise of 33%. The reasons behind this continued increase remain unclear and further research is needed to elucidate potential factors in aetiopathogenesis.

G355 PRESENTING PHENOTYPE OF ULCERATIVE COLITIS (UC) IN CHILDREN 2010–13

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Aims There has been a two-fold increase in the incidence of paediatric-onset UC over the last 20 years; there are few recent reports of the presenting phenotype – symptoms, inflammatory markers and disease extent. We report the presenting features of a defined cohort and compare to previous data.

Methods Patients diagnosed with UC at University Hospitals Southampton from 2010–2013 were identified from an in-house database. Data were obtained from note review using a standardised proforma and compared to previous UK data.¹ Weight and height at diagnosis are presented as median SDS (95% CI).

Results 49 children were included. Median age 13.18 (Range 1.59–16.24 years), 27 male. The most common presenting features are seen in Table 1. Weight loss (36.7%) and lethargy (36.7%) were less common. The majority of patients presented with pancolitis (68.1%).

A significant number of patients present with normal inflammatory markers (percentage with normal CRP 69.4%, normal ESR 34.9%). Median CRP 3.0 mg/L (0.0–12–9), ESR 21.5 mm/hr (15.2–26.8)).