

(5.1–61). Serum lactate median was 2.1 (0.1–11.2). Neurological findings were determined in 22.4% of the patients. Normobaric oxygen treatment was given to 75.5% of the patients, while 24.5% were given hyperbaric oxygen treatment. A positive correlation was determined between Lactate and COHb levels ($P=0.01$, $r=0.228$). A negative correlation was determined between Glasgow Coma Scale and COHb levels ($p=0.01$, $r=-0.383$). Patients with neurological findings had an average COHb level at $35.7\% \pm 16$, patients without neurological findings had an average COHb level at $22.5\% \pm 7.7$ ($p=0.001$). Blood lactate level was higher in patients with neurological findings than patients without neurological findings ($p=0.01$).

Results COHb level in carbon monoxide poisoning cases is an important indicator for the existence of neurological findings. Since increase in lactate is correlated with the poisoning level and neurological findings, high lactate levels should be taken into consideration.

370 A RANDOMISED TRIAL OF DEXAMETHASONE VERSUS PREDNISOLONE IN THE TREATMENT OF ACUTE PAEDIATRIC ASTHMA EXACERBATIONS

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Introduction The aim of this open-label trial is to examine whether a single dose of dexamethasone is non-inferior to a 3-day course of prednisolone in the treatment of exacerbations of asthma in children who attend the Emergency Department (ED).

Methods Participants were identified on ED presentation, eligibility was confirmed and informed consent was obtained. Patients were randomised to receive either a stat dose of oral dexamethasone 0.3mg/kg (max 12mg) or prednisolone 1mg/kg/day (max 40mg) for 3 days. Otherwise standard treatment was administered.

Following discharge from the ED, patients were clinically reviewed on Day 4, and by telephone on Day 14. The primary outcome measure was the Pediatric Respiratory Assessment Measure (PRAM score) at Day 4. Secondary measures include relapse rate, requirement for more steroids, number of salbutamol therapies, and vomiting.

A sample size of 210 subjects will be sufficient to reject the null hypothesis - that the population means of both groups are equal with a probability of 0.9. The Type I error probability is 0.05.

Results 201 individual asthma exacerbations (101 prednisolone, 100 dexamethasone) have so far been enrolled. Demographic details and exacerbation severity are equal across both groups. We will complete enrolment in May 2012.

Conclusion The results of this randomised trial may have a significant impact on the management of acute asthma in children. At current rates we will complete recruitment in May 2012 and will present full results at the conference.

371 RARE PRESENTATION OF ACUTE DEMYELINATING ENCEPHALOMYELITIS IN A CHILD WITH EXCESSIVE FATIGUE AND SLEEPINESS

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The encephalopathic child is a paediatric emergency and presents a considerable challenge.

We present a 4 year old boy who was admitted with 3 week history of excessive fatigue and sleepiness, waking for only 4–5 hours a

day. He had occasional episodes of vacant stares and "wanted to go home", when was at home.

He had gastroenteritis after exposure to snails at nursery and was treated for otitis media by general practitioner. There was no history of fever or foreign travel.

He was sleepy with normal neurology and an aphthous ulcer over lower lip. He was managed as encephalitis and treated with acyclovir, ceftriaxone and clarithromycin. He had neutrophilia with normal lumbar puncture and viral PCR's.

After a week of admission, he deteriorated with generalized pain, bedwetting, ataxia and upper motor neuron signs. MRI scan showed asymmetric, bilateral white matter changes suggestive of acute demyelinating encephalomyelitis (ADEM) or other viral encephalitis.

Repeat lumbar puncture showed pleocytosis with neutrophilia. Viral PCR's were negative. ASOT was raised. MRI with contrast showed 4 mm high signal focus behind C2 body and C2–3 disk.

After completing a 10 day course of acyclovir, he was started on methyl prednisolone for ADEM and drastically improved. He was discharged after 3–4 days of the treatment with follow up.

This case initiated a lot of discussions- presence of fever to diagnose encephalitis? When to start and stop acyclovir in suspected encephalitis with negative viral PCR's? To start steroids or not - why the delay?

372 ACTIVATED CHARCOAL FOR GHB INTOXICATION IN CHILDREN: AN IN VITRO STUDY

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Background and Aims Treatment of intentional (mainly by adolescents) and unintentional (mainly by children) intoxications with the increasingly popular drug gamma-hydroxybutyrate (GHB) primarily consists of symptomatic treatment. The usually rapid absorption and the need for intubation argue against activated charcoal (AC) treatment in GHB intoxications. However, the use of AC has been suggested in several guidelines and in literature, but it has never been demonstrated to what extent GHB binds (adsorbs) to AC. Reduction of GHB absorption by AC administration could be clinically relevant, especially in children. Therefore, binding of GHB to AC in an in vitro model was tested.

Methods Different quantities (2.5, 5, 7.5, or 10 grams) of AC were mixed with a dose of 800 mg GHB at 37°C in 100 mL simulated gastric (pH 1.2) or intestinal (pH 7.2) fluid, respectively. Subsequently, after 15 minutes of incubation the AC was separated from the liquid by centrifugation and the remaining GHB quantified by gas chromatography. GHB binding to AC was plotted in a binding curve.

Results Binding of GHB to AC was dose-dependent. At gastric pH, binding was higher than at intestinal pH, with a maximum binding of 84.3% and 23.3%, respectively, with 10 grams of AC, corresponding with a high adult dose.

Conclusions AC has GHB binding capacity, which is pH dependent. In case of (un)intentional intake of GHB by children, rapid treatment with AC may be considered.

373 CHARACTERISTICS AND COMPLICATIONS IN ORAL CAUSTIC INGESTION IN CHILDREN

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The aim of this study is to evaluate the prevalence of gastrointestinal symptoms in caustic ingestion, the severity of lesions and the role of early conducted endoscopy in prediction of outcome. In a cross-sectional study all children hospitalized for caustic ingestion during two years, aged 12 years and younger were evaluated for clinical history, endoscopic findings, method of treatment and observed complications. Out of 51 children, 8 consumed acidic and 43 alkaline materials. The mean age of the children was 35.9 \pm 18 months. Thirty four (66.7%) patients were male and 17 (33.3%) were female. In endoscopic survey, 38% had grade 1 and 62% had a burning intensity of grade 2 or higher. During the follow-up, esophageal structure developed in 5 cases and Gastric Outlet Obstruction (GOO) in 1 case. Two of 5 patients with stricture were treated by endoscopic dilatation and 3 of them underwent colon transposition surgery. Gastrectomy was done for the patient with GOO. Esophageal structure as a complication had a more incidence in acid ingestion. Gastric Outlet Obstruction (GOO) occurred in a case of acid ingestion. One of the patients died. Positive statistical relation between early endoscopic findings and complications found in control endoscopy suggest that early endoscopy probably is safe and provides important prognostic information. The role of prevention as a comprehensive strategy promoted by medical councils and the mass media is imperative.

374 IMPACT OF A WORKING GROUP ON GASTROINTESTINAL DECONTAMINATION OF PEDIATRIC EMERGENCY IN SPAIN

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Introduction In a study conducted in 2001–02 including 17 pediatric emergency departments (PED) in Spain high variability was detected in management of acute pediatric intoxications and, more specifically in the gastrointestinal decontamination. Since that time, the Working Group of Intoxications (WGI) of the Spanish Pediatric Emergencies Society (SEUP) Poison designed and spread in different ways recommendations based on international guidelines based on scientific evidence about the management of these patients.

The objective of this study is to analyze the impact of the measures designed by the WGI in the management of acute intoxications in PED.

Patients and Methods Comparative study cohort. We analyze the management and, specifically, gastrointestinal decontamination in three time periods in the PED included in the WGI:

- Group A: 2001–02, 17 PED, 2157 episodes
- Group B: 2008–09, 37 PED, 612 episodes
- Group C: 2009–11: 42 PED, 400 episodes

Results Of the 3169 episodes recorded, 1031 (32.5%) underwent for a gastrointestinal decontamination procedure (Group A: 34.1%, Group B: 27.8%, Group C: 31.5%)

Of the patients who underwent gastrointestinal decontamination, technique used in each group are described in the following table.

Abstract 374 Table 1 Decontamination technique used in each group

TECHNIQUE	2001–2002 N (%)	2001–2008 N (%)	2009 N (%)	2010 N (%)	2011 N (%)	p
Activated charcoal	697 (94,8)	159 (93,5)	50 (98)	39 (95,1)	32 (96)	n.s.
Gastric lavage	214 (29,1)	48 (28,2)	16 (31,4)	12 (29,3)	5 (14,7)	0,08
Ipecac syrup	168 (22,8)	3 (1,7)	0 (0)	0 (0)	0 (0)	0,0004

Conclusions Recommendations developed and spread by a Working Group have approached the management of acute pediatric poisonings in Spain to international guidelines based on scientific evidence.

375 PAEDIATRIC ABDOMINAL PAIN: A CALL FOR A BAYESIAN APPROACH TO DECISION MAKING

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Background/aim of study Paediatric abdominal pain is a common. Efficient investigation and triage remains a challenge with stubborn rates of negative appendicectomy.

This study analysed the characteristics of paediatric presentations with abdominal pain.

Methods Retrospective review of presentations to casualty with abdominal pain in calendar years 2005–2006. Data was collected on age, sex, time of presentation, investigations and outcomes.

Main results 1. 1007 patients presented with abdominal pain with a female preponderance. A peak in incidence about the age of 6–7 in both sexes was noted. The incidence in both sexes then stabilised till a pubertal rise in female incidence.

There is a seasonal variation with approx 25% more pain presentations in winter. No such seasonal effect was seen for appendicitis.

Overall abdominal pain is more likely to present after midday, while appendicitis presents throughout the day.

81 of 1007 patients had appendicectomies, 61 with appendicitis. Adolescent females were much more likely to have normal appendixes removed, with $p < 0.001$.

2. Mean WCC was 15.1 for those with true appendicitis, compared to 11.4 for those with normal appendixes: WCC sensitivity 87% and specificity 90%.

In those who had ultrasound, the appendiceal visualisation rate was 57%.

Conclusion Paediatric abdominal pain presentations vary in incidence depending on sex, age, season and time of day. Conditions requiring operation are relatively uncommon, and the patient's background, history and a priori likelihood of disease should be considered before ordering investigations or operation.

376 EVALUATION OF KNOWLEDGE LEVEL ON CHILDHOOD ASTHMA AMONGST TEACHERS IN ISTANBUL

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Aim A survey including the questions about the general information about childhood asthma, symptoms, triggers, emergency medical care in attack was applied to the teachers, and their education level was determined.

Patients/methods This study was done with the participation of randomly selected 826 teachers from 22 different (20 primary+middle and 2 high) schools between November to December 2011 in Istanbul. The teachers were questioned with a survey consisting of questions about the general information on asthma, symptoms, triggers, emergency care in the asthma attack, and therapy. Likert scale was used for the evaluation of answers (Disagree, Partly Disagree, Not Sure, Partly Agree and Agree).

Results The knowledge grades of general information on asthma were calculated as one of the highest, while the grades for triggers were found to be the lowest. According to the sex, the average grade