reason behind her suicide attempt was emotional reaction to stressful event.

She was closely monitored for development of any of criteria for liver transplantation (hepatic encephalopathy, severe acidosis, severe coagulopathy INR $5 <$), but she did not develop any. Thus, even though NAC administration was delayed, it was efficient in the prevention of hepatotoxicity. She was discharged on day 15 after ingestion, with decreasing AST and ALT values (47 U/L and 437 U/L, respectively). On her check-up one month later transaminase levels were in normal range.

195 INTRAVENOUS ACETAMINOPHEN OVERDOSE – A THERAPEUTIC ERROR

Nikolina Benko Kordić*, Ames Rešić, Miro Bakula Clinical Hospital Sveti Duh. *Children's Hospital Zagreb*

10.1136/archdischild-2021-europaediatrics.195

A 8-month-old female infant, weighing 7kg, with persistent cloaca, anal atresia, right renal agenesis, grade 3 vesicoureteral reflux, double-barrel colostomy and left nephrostomy was admitted to Department of Nephrology of Children's Hospital Zagreb for a urinary tract infection. On the sixth day, due to clinical deterioration and inadequate response to given antibiotic therapy she underwent a central venous catheter placement, amikacin was replaced with cefepime. That night, around midnight, she got a high fever and, as antipyretic, 100 ml of intravenous acetaminophen solution was administered. Shortly after, the nurse contacted the doctor on call and admitted to making a therapeutic error – instead of 100 mg of acetaminophen, she administered 100 ml of intravenous acetaminophen solution (10mg/ml), thus administering 1000 mg (142 mg/kg). Four hours after the administration serum acetaminophen concentration was 465 mcg/ml. She was transferred to intensive care unit and intravenous N-acetylcysteine (NAC) was started immediately, starting with loading dose of 1 gram in 25 ml 5% glucose solution over 1 hour, then 350mg in 50 ml 5% glucose solution, continued with maintenance dose of 700mg in 100 ml 5% glucose solution over the next 16 hours, following the 21-hour NAC protocol. Blood tests (liver and kidney functions, ammonia, prothrombin time, blood gas analysis) were performed daily, all values were in normal range. Infant remained well and without hepatic impairment. The treatment of NAC infusion over 21 hours was efficacious. This was a case of unintentional overdose, error in dose calculation and therapeutic error. Therapeutic errors such as 10-fold overdosing are common, especially during the night shift, so additional caution is needed. Dose of intravenous acetaminophen on medication order has to be written both in milligrams and millilitres to avoid dosing and administration errors.

196 COMBINED INTRANASAL DEXMEDETOMIDINE AND KETAMINE VS INTRANASAL DEXMEDETOMIDINE AND ORAL MIDAZOLAM FOR PROCEDURAL SEDATION IN CHILDREN: A RANDOMIZED MULTICENTRE TRIAL

Andrea Trombetta*, Francesca Cossovel, Egidio Barbi. *University of Trieste*

10.1136/archdischild-2021-europaediatrics.196

The aim of this study is to compare combination of intranasal dexmedetomidine and ketamine to intranasal dexmedetomidine and oral midazolam to evaluate induction time in children undergoing procedural sedation. In this specific setting a procedural sedation approach avoiding general anesthesia, the need for an intravenous line and the use of drugs with higher risk of paradoxical reactions (midazolam), emergency reactions

(sevoflurane) or respiratory depression (propofol) would be welcome.

Our multicentre trial was conducted in a tertiary pediatric teaching hospital and in a secondary hospital on patients in need of procedural sedation who referred to our hospitals from November 2019 to March 2020.

Sedation was performed by trained paediatricians with specific expertise and training in paediatric sedation, airway management and cardiovascular resuscitation. All consecutively admitted subjects were randomized to receive one-time dose (4 mcg/kg) of intranasal dexmedetomidine and 3µg/Kg of intranasal ketamine or one-time dose of 4mcg/Kg of intranasal dexmedetomidine and oral midazolam (0.5mg/Kg) with the intended goal to compare induction-time, effectiveness and adverse effects of such sedation.

The patient who did reach an adequate sedation level underwent an intravenous line positioning and a dose of ketamine or propofol.

Fifty patients were recruited to receive intranasal dexmedetomidine and ketamine and fifty patients were recruited to receive intranasal dexmedetomidine and oral midazolam. The induction time was significantly lower in the intervention group when compared to the control group, while sedation success rate was similar in both groups and any major adverse effect was observed in both groups.

The combination of intranasal dexmedetomidine and ketamine should be considered as a possible option in for procedural sedation in children, in particular in settings in which is essential to shorten induction-time, without any further adverse effect and with a success rate comparable to oral midazolam and intranasal dexmedetomidine.

197 THE MAJOR CAUSES OF DRUG INTOXICATIONS IN CHILDREN

Sargis Khachatryan*, E Harutyunyan, L Shahumyan, A Asatryan, H Shahumyan, A Aghajanyan, I Atoyan, A Sahakyan, G Manukyan, K Esayan, S Mirabyan, A Sahakyan, M Grigoryan, B Baveyan, V Asoyan, H Apresyan. *Yerevan State Medical University*

10.1136/archdischild-2021-europaediatrics.197

In this study we aimed to investigate the most common drugs that caused ADIs in 0-18 year old patients and to observe the prevalence of suicide attempts.

A retrospective study was performed using medical charts up to 7 years (2012-2018) from 'Muratsan' University hospital complex (UHC) ICU and toxicology. We have separated the patients in four age groups (0-1; 1-7; 7-14; 14-18 years old). The overall number of patients who had ADIs and were admitted to resuscitation unit was 1260. Mean age of patients was 4.7 years. We have included the most common drug intoxications typical for each age group.

114 patients under 1 year old have been diagnosed with ADI: 34(29.8%)-non-opioid analgesics, 15(13.2%)-cardiac

medications, 9(7.9%)-H1-antagonists, 8(7%)-alpha-agonists, 6 (5.3%) patients-vitamin tablets, 42 (36.8%)-other drugs*.

By observing the 928 patients aged 1-7 years old we found out the following results:cardiac medications-243 (26.2%) patients, nonopioids-130 (14%), antipsychotic-127 (13.7%), antibiotics-67 (7.2%), 361 (38.9%)-other drugs. There were 5 suicide attempts.

The analysis of 93 patients aged 7-14 years old led to following results: nonopioids-26(28%) patients, antipsychotic drugs-18(19.4%), cardiac medications-14(15%), H1-antagonists-11 (11.8%), antiemetic drugs-9 (9.7%), 15 (16.1%)-other drugs. There were 22 suicide attempts.

The number of 14-18 years old patients with ADIs was 125, among them 53 (42.4%) patients were poisoned with nonopioids, 23(18.4%)-antipsychotic drugs, 19(15.2%)-H1-antagonists, 12 (9.6%)-cardiac medications, 18 (14.4%)-other drugs. There were 91 suicide attempts.

*hormone medications, antibiotics, antifungal drugs, PPIs, PG analogues, etc.

We found out that there are 4 most common reasons for ADIs in children: non-opioid analgesics, cardiac medications, antipsychotic drugs and H1-antagonists. The first two drug classes cause predominantly ADIs in 0-7 years old children. This phenomenon might be associated with extreme curiosity of kids as well as with parental negligence. In contrast to this, children aged 7-18 overuse mostly antipsychotic drugs and H1-antagonists and are inclined to suicide attempts.

198

WHAT DRUGS CAUSE INTOXICATIONS IN CHILDREN?

Sargis Khachatryan*, E Harutyunyan, L Shahumyan, A Asatryan, H Shahumyan, A Aghajanyan, I Atoyan, A Sahakyan, G Manukyan, K Soyoyan, S Mirabyan, A Sahakyan, M Grigoryan, B Baveyan, V Asoyan, H Apresyan. *Yerevan State Medical University*

10.1136/archdischild-2021-europaediatrics.198

In this study we aimed to investigate the most common drugs that caused ADIs in 0-18 year old patients and to observe the prevalence of suicide attempts. A retrospective study was performed using medical charts up to 7 years (2012-2018) from 'Muratsan' University hospital complex(UHC) Intensive care unit (ICU) and toxicology. We have separated the patients in four age groups (0-1;1-7;7-14;14-18 years old). The overall number of patients who had ADIs and were admitted to resuscitation unit was 1260. Mean age of patients was 4.7 years. We have included the most common drug intoxications typical for each age group.

114 patients under 1 year old have been diagnosed with ADI: 34 (29.8%)-non-opioid analgesics, 15 (13.2%)-cardiac medications, 9 (7.9%)-H1-antagonists, 8 (7%)-alpha-agonists, 6 (5.3%) patients-vitamin tablets, 42 (36.8%)-other drugs*. By observing the 928 patients aged 1-7 years old we found out the following results: cardiac medications-243 (26.2%) patients, nonopioids-130 (14%), antipsychotic-127 (13.7%), antibiotics-67 (7.2%), 361 (38.9%)-other drugs. There were 5 suicide attempts.

The analysis of 93 patients aged 7-14 years old led to following results: nonopioids-26 (28%) patients, antipsychotic drugs-18 (19.4%), cardiac medications-14 (15%), H1-antagonists-11 (11.8%), antiemetic drugs-9 (9.7%), 15 (16.1%)-other drugs. There were 22 suicide attempts.

The number of 14-18 years old patients with ADIs was 125, among them 53 (42.4%) patients were poisoned with

nonopioids, 23 (18.4%)-antipsychotic drugs, 19 (15.2%)-H1-antagonists, 12 (9.6%)-cardiac medications, 18 (14.4%)-other drugs. There were 91 suicide attempts. *hormone medications, antibiotics, antifungal drugs, PPIs, PG analogues, etc.

We found out that there are 4 most common reasons for ADIs in children: non-opioid analgesics, cardiac medications, antipsychotic drugs and H1-antagonists. The first two drug classes cause predominantly ADIs in 0-7 years old children. This phenomenon might be associated with extreme curiosity of kids as well as with parental negligence. In contrast to this, children aged 7-18 overuse mostly antipsychotic drugs and H1-antagonists and are inclined to suicide attempts.

Paediatric Endocrinology and Diabetes

199

ABNORMAL TSH LEVELS AND PEDIATRIC OBESITY

Michael Yafi*. *University of Texas Health Science Center at Houston*

10.1136/archdischild-2021-europaediatrics.199

To determine the prevalence of elevated thyroid-stimulating hormone (TSH) levels in obese children and adolescents referred to pediatric endocrinology clinics and its association with positive Anti Thyroid Peroxidase Antibodies. (Anti TPO) A retrospective review of medical records of 100 obese children referred for abnormal thyroid function test was performed. Children were younger than 18 years of age with BMI above 95th percentile.

Data about age, sex, body mass index, TSH, thyroid functions, thyroid antibodies, were collected.

All patients were referred for abnormal thyroid function tests and got repeated tests along with Anti TPO levels. Interpretation of TSH results showed normal level for age in 65% and slightly elevated TSH but below 10 uIU/ml in 32% Only three obese patients (3%) had Hashimoto disease (positive Anti TPO) and elevated TSH requiring therapy.

Obese children are often screened and referred to pediatric endocrinology for abnormal thyroid function test. It is well known that TSH levels are mildly increased in obese children but there are no evidence-based data that treating this elevation can change the outcome of obesity.

Mild elevation of TSH values in the absence of autoimmune thyroid disease is common in obese children and adolescents. This elevation is often a result of obesity rather than a cause. High Leptin level in obese children has been postulated as an etiology.

Many primary care providers and even parents are looking for 'an easy fix' of obesity by making the diagnosis of hypothyroidism and treating it.

Screening for thyroid dysfunction in obese children should be done based on symptoms and family history rather than dealing with obesity alone.

200

TELEMEDICINE AS A METHOD OF PROVIDING PHYSICIAN COVERAGE A PILOT EXPERIENCE IN A PEDIATRIC ENDOCRINOLOGY CLINIC

Michael Yafi*, Belinda Perzan, Michelle Rivera-Davila, Katherine Velez, Robert Yetman. *University of Texas Health Science Center at Houston*

10.1136/archdischild-2021-europaediatrics.200