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**

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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 nephrectomy 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**

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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 we performed a procedural sedation approach avoiding general anesthesia, the need for an intravenous line and the use of drugs with higher risk of paradoxical reactions (sevoflurane) or respiratory depression (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 3 mcg/Kg of intranasal ketamine or one-time dose of 4 mcg/Kg of intranasal dexmedetomidine and oral midazolam (0.5 mg/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 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**


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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
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.