pain. Among systemic symptoms, one child developed anaphylaxis and two patients had neurological involvement such as pto- sis and diplopia. Blood tests were performed at admission; 62.5% of children had leukocytosis with neutrophilia. Patients with an abnormal white blood cell count (using age specific cut-off) on arrival showed a longer hospitalization time (from 3 to 14 days) than patients with normal WBC (probability 100% versus 50%, p = 0.038) and were more often classified on the basis of clinical features as grade 2 or 3 of the CGS (87.5% versus 25.0%, p = 0.0203). (Table 1).

**Conclusion:** Viper bite is a rare pediatric medical emergency in Italy, but can sometimes be severe. Leukocytosis at admission was significantly associated with a longer hospitalization and with a higher CGS. We therefore suggest the use of leukocytosis at admission as an important parameter for the severity of viper bite poisoning.

### 268. Accidental repeated supratherapeutic overdose of paracetamol in a neonate with prolonged paracetamol elimination half-life

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**Objective:** We report a case of accidental repeated supratherapeutic dosing of paracetamol in a neonate with hyperbilirubinemia and prolonged paracetamol elimination.

**Case report:** A 10-day-old, 3.5 kg, male, born at 38-weeks’ gestation, was referred with an elevated paracetamol concentration. The child underwent circumcision six days after birth and was accidentally given four doses of 200 mg (56 mg/kg) of paracetamol over 24 hours (224 mg/kg total). Due to misinterpretation of syringe markings, the mother dosed 200 mg (2 mL) instead of 50 mg (0.5 mL). Two days later, she realized the error when using a different syringe to administer 40 mg paracetamol. Blood tests by the general practitioner 19.5 hours after this last dose revealed paracetamol concentration 381 μmol/L (57 mg/L), ALT 18 IU/L (normal <40), with total bilirubin 262 μmol/L (normal <300) and gamma glutamyltransferase (GGT) 83 IU/L (normal <50). In hospital, repeat paracetamol concentration, assayed 29.5 hours post-last dose, was 236 μmol/L. Bilirubin was 284 μmol/L (16.6 mg/dL). Acetylcysteine was commenced six hours later using a 2-bag, 20-hour regimen and continued for 27 hours, when serum paracetamol was undetectable and ALT was 29 IU/L. He was discharged home clinically well. On follow up one week later, he remained well, however, serum ALT was 58 IU/L with total bilirubin 308 μmol/L. Elimination half-life calculation for paracetamol was 14.5 hours with apparent first-order elimination.

**Conclusion:** Elimination half-life for paracetamol in adults after therapeutic dosing is 1.5-3 hours [1] and in healthy neonates 3.5 hours [2]. After acute overdose, neonatal elimination half-life is 5.7-9 hours. In this case, hyperbilirubinemia was unlikely to interfere with the paracetamol assay, given the concentration was eventually undetectable. We hypothesize that the prolonged half-life may have been influenced by unconjugated hyperbilirubinemia which utilises glucuronidation to form conjugated bilirubin. This may prevent effective paracetamol glucuronidation. In neonates, paracetamol preferentially undergoes sulphation, however in the presence of supratherapeutic paracetamol concentration this may saturate [2]. Immaturity of neonatal cytochrome enzymes [3], particularly CYP2E1, which produces the toxic metabolite of paracetamol, may also influence the lack of hepatic injury despite the delay in treatment.

### References


### 269. Pediatric, self-harm cases comprise a large proportion of intentional exposures to methylphenidate reported to participating poison centres

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**Objective:** To examine characteristics of intentional exposures involving methylphenidate in Italy, Germany, and France.

**Methods:** Data from the Researched Abuse, Diversion and Addiction-Related Surveillance (RADARS\(^\text{®}\)) System Global Toxicosurveillance Network (GTNet) were used. The number of intentional exposures was calculated using data collected from participating poison centres.

#### Table 1. Intentional exposures* in pediatric patients involving methylphenidate by country.

<table>
<thead>
<tr>
<th>Country</th>
<th>Total intentional exposure cases</th>
<th>Pediatric intentional exposure cases (% of total)</th>
<th>Intentional exposure cases involving methylphenidate</th>
<th>Pediatric intentional exposure cases involving methylphenidate (% of exposures involving methylphenidate)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Germany</td>
<td>7,070</td>
<td>275 (3.9%)</td>
<td>278</td>
<td>86 (30.9%)</td>
</tr>
<tr>
<td>Italy</td>
<td>8,684</td>
<td>315 (3.6%)</td>
<td>6</td>
<td>3 (50.0%)</td>
</tr>
<tr>
<td>France</td>
<td>1,612</td>
<td>252 (15.6%)</td>
<td>23</td>
<td>13 (56.5%)</td>
</tr>
</tbody>
</table>

*Restricted to exposures involving select benzodiazepines (alprazolam, diazepam, etizolam, flunitrazepam, flurazepam, lorazepam, lormetazepam, nitrazepam, oxazepam), GABA analogs (gabapentin, pregabalin), opioids (buprenorphine, codeine, fentanyl, methadone, morphine, oxycodone, pethidine, meperidine, tapentadol), stimulants (methylphenidate), and Z-drugs (zaleplon, zolpidem, and zopiclone).
Case report: A 7-year-old, otherwise healthy, child was sent to hospital with a 4-day history of drowsiness, feeding difficulties and constipation. He was in poor general condition, with signs of dehydration, hyporeactivity, diffuse hypotonia and mild mydriasis. The spider was identified as a yellow sac spider (Cheiracanthium punctorium) bite in a child: a case report

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Objective: Infant botulism (IB) is a rare, life-threatening condition. We present a case of IB that is interesting because of the severe presentation, unusual source of intoxication and non-conventional treatment.

Case report: A 4-month-old male (6.5 kg) was admitted to hospital with a 4-day history of drooling, feeding difficulties and constipation. He was in poor general condition, with signs of dehydration, hyporeactivity, diffuse hypotonia and mild mydricasis. Blood tests showed dehydration, acidosis and hypoglycemia (pH 7.33, base excess -5.9, glucose 46 mg/dL) without sign of infection or organ dysfunction. Treatment with fluids, glucose and electrolytes was started but his clinical condition gradually worsened and the baby was admitted to the intensive care unit where he was intubated due to respiratory failure. Medical history revealed that he has been exposed to dust from a large construction site near his home. IB was suspected. The diagnosis was confirmed by stool detection of the neurotoxin-producing clostridia. The spider was identified as a yellow sac spider (Cheiracanthium punctorium) whose venom can cause systemic effects. Steatoda paykulliana and the less dangerous Cheiracanthium punctorum (yellow sac spider) are responsible for local symptoms [1]. Cheiracanthium is an expanding species in Europe, whose venom is a unique two-domain cytotoxic polypeptide [2] and whose bite usually produces local pain, swelling and redness [3]. We present a case of Cheiracanthium punctorum bite in a child that resulted in self-limiting systemic toxicity.

Case report: A 7-year-old, otherwise healthy, child was sent to our ED by another hospital with complaint of a “possible Loxosceles rufescens” bite two days before. The patient presented bilateral non-secreting conjunctivitis with palpebral edema, low-grade fever and rash. Netilmicin collyrium and amoxicillin clavulanate were administered. Blood tests reported several anomalies: eosinophilis 8.8% (reference 0-7), fibrinogen 174 mg/dL (reference 200-400) and D-dimer 740 ng/mL (reference 0-500). Physical examination showed a spider bite consisting of a tender lesion in the left knee fold, rash on the lower limb and bilateral inguinal adenitis. The spider was identified as a Cheiracanthium punctatum by an entomologist from images taken by the parents and the child was hospitalized; during the next 24 hours he became afebrile, apyretic, in good clinical condition, with progressive improvement of the lesion, and resolution of the rash. Blood tests normalized and he was discharged.

Reference