pain. Among systemic symptoms, one child developed anaphylaxis and two patients had neurological involvement such as ptosis 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 hyperbilirubinaemia 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.

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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®) System Global Toxicosurveillance Network (GTNet) were used. The number of intentional exposures was calculated using data collected from

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

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

*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).

participating poison centres in Italy (Milan), Germany (Göttingen), and France (Paris). Intentional exposures include exposures where the patient was attempting to gain a euphoric effect (abuse), self-harm (suicide), or intentionally improperly used a medication for reasons other than to gain a euphoric effect or for self-harm (misuse). Data collected on exposures involving methylphenidate and select benzodiazepines, opioids, and Z-drugs from the first quarter of 2012 through fourth quarter 2016 were analyzed. Pediatric cases were defined as cases ranging from age 1 to 17 years.

Results: In each country, a greater percentage of intentional exposures involving methylphenidate were pediatric exposures relative to all intentional exposures included in the analysis (Table 1). In Germany, 278 intentional exposures involved methylphenidate, 86 of which involved a pediatric patient (7 to 17 years). The intent of 70 (81%) of the pediatric methylphenidate intentional exposures in Germany was self-harm. In Italy, six intentional exposures involved methylphenidate, three of which involved a pediatric patient (11 to 15 years). The intent of two (67%) of the pediatric methylphenidate intentional exposures in Italy was self-harm. In France, 23 intentional exposures involved methylphenidate, 13 of which involved a pediatric patient (11 to 17 years). The intent of 11 of the pediatric methylphenidate intentional exposures (85%) in France was self-harm.

Conclusion: Though methylphenidate makes up a small proportion of intentional exposures included in these analyses, a disproportionate number of these exposures are pediatric cases. Upon further investigation of these pediatric cases, self-harm was the intent for the majority.

270. Differential diagnosis of botulism in an acutely hypotonic infant

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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 drowsiness, feeding difficulties and constipation. He was in poor general condition, with signs of dehydration, hyporeactivity, diffuse hypotonia and mild mydriatic pupils. 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. Household dust samples tested negative for botulin toxin-producing clostridia. The patient was treated with trivalent equine antitoxin (10 mL/kg) without adverse events. After antidote treatment clostridiocidal antibiotic therapy was started and then probiotics were administered to restore intestinal flora. Supportive therapies and a rehabilitation program were started. Clinical condition progressively improved and he was discharged after 4 weeks. A 6 month-follow up showed complete recovery of motor functions and muscular tone.

Conclusion: The case described was particularly severe and required administration of the antitoxin. Antitoxin is not always readily available. In our experience, trivalent equine antitoxin can be safely administered in severe cases. Effectiveness and safety have been demonstrated in a large case series in Italy [1] and this treatment has been successfully adopted in other countries. In our case the source of spores was not identified, but the patient was exposed to a high level of dust and we suppose that this environment together with an individual predisposition of the baby is responsible for the illness. In conclusion it is important to warn clinicians to suspect IB in infants with a recent onset of hypotonia or a history suggestive of possible exposure. The excessive presence of environmental dusts should help in the diagnostic suspicion.

Reference

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271. Yellow sac spider (*Cheiracanthium punctorium*) bite in a child: a case report

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Objective: Although most spiders in Italy are not particularly venomous some potentially dangerous species have to be considered: *Latrodectus tredecimguttatus* and *Loxosceles rufescens*, whose venom can cause systemic effects. *Steatoda paykulliana* and the less dangerous *Cheiracanthium punctorium* (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 punctorium* 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: eosinophils 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 punctorium* by an entomologist from images taken by the parents and the child was hospitalized; during the next 24 hours he became apyretic, in good clinical condition, with progressive improvement of the lesion, and resolution of the rash. Blood tests normalized and he was discharged.