

## **Pregabalin – an assessment of its toxicity**

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**Objective:** The aim of the study was to assess the toxicity of pregabalin in overdose, because there is little information in literature on this topic.

**Methods:** A multicentre retrospective analysis of cases of acute overdose of pregabalin. Inclusion criteria were monointoxication, defined dose, and documented follow-up. Severity of symptoms was assessed according to the Poisoning Severity Score.

**Results:** In total, 133 cases could be included. Patients involved were 21 children (0.06 – 13 years) and 112 adolescents (14 – 17 years) and adults (18 – 90 years). Doses ranged between 15 -1350 mg (5.6 – 30.6 mg/kg) in children and 75 – 13500 mg in adolescents/adults. More than half of the children (52 %) remained asymptomatic, others developed only mild symptoms. In adolescents/adults 77 % suffered from mild (63 %) or moderate (14 %) symptoms. Mild effects were observed from a dose of 75 mg (2.7 mg/kg) in children, whereas asymptomatic course was observed up to 300 mg (30.6 mg/kg). Doses from 225 mg and 200 mg caused mild or moderate symptoms in adolescents/adults, respectively. There were cases with a dose up to 4200 mg without symptoms. Two elderly people developed moderate symptoms at a dose of 75 mg. The clinical features of poisoning are particularly characterized by neurologic symptoms like fatigue (7%), drowsiness (7%), somnolence (26%), dizziness (12%), ataxia (10%), muscular symptoms like myoclonus (6%), and gastrointestinal symptoms (nausea/vomiting 9%). Infrequently, seizures, tachycardia or bradycardia, hypertension, and respiratory insufficiency were observed.

**Conclusion:** In the present study, in most cases overdose of pregabalin resulted in no or only mild effects (88%). Only 12% of all patients suffered from moderate symptoms. Particularly, elderly people seem to be more susceptible. Severe symptoms were not observed. There is no clear correlation between dose and severity of symptoms. These findings are in accordance with the results of Lackey et al. (1). Further investigations are necessary to assess the toxicity of pregabalin especially in children.

### **References:**

1. Lackey G, Ashraf T, Alsop J, Listiawan M, Albertson T. A 48 month retrospective review of pregabalin ingestions in adults. *Clin Toxicol* 2012; 50:671.