

Poisoning caused by selfmedication with harmal seeds

Katharina Fabeck, Luc de Haro, Nicolas Simon

► **To cite this version:**

Katharina Fabeck, Luc de Haro, Nicolas Simon. Poisoning caused by selfmedication with harmal seeds. 40th International Congress of the European Association of Poisons Centres and Clinical Toxicologists (EAPCCT), May 2021, Tallinn, Estonia. pp.540. inserm-03221821

HAL Id: inserm-03221821

<https://www.hal.inserm.fr/inserm-03221821>

Submitted on 10 May 2021

HAL is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.

Poisoning caused by selfmedication with harmal seeds

Katharina Von Fabeck^a, Luc De Haro^a and Nicolas Simon^b

^a Hôpital Sainte Marguerite, APHM, Service de Pharmacologie Clinique, Centre Antipoison et de Toxicovigilance, Marseille, France; ^b Aix-Marseille Univ, APHM, INSERM, IRD, SESSTIM, Hôpital Sainte Marguerite, Service de Pharmacologie Clinique, Centre Antipoison et de Toxicovigilance, Marseille, France

Objective: *Peganum harmala* (harmal, wild rue) grows in Mediterranean areas. Different parts of the plant are used to dye carpets or wool, to protect against “the evil eye” or as recreational drugs. *Peganum harmala* is classified as a noxious weed because its seeds contain the alkaloids harmine and harmaline. These are monoamine oxidase A inhibitors (MAOIs) and increase the effects of psychoactive drugs or are required to make drugs orally active. Combined in an entheogenic brew with dimethyltryptamine (DMT) extracted from *Banisteriopsis caapi*, they are used as a traditional spiritual medicine. Cases of poisoning with this plant when used as a traditional medicine have been reported [1,2] and we report a case of poisoning in a child. **Case report:** To treat their 12-year-old boy’s nocturnal enuresis, parents in La Réunion prepared an infusion with a handful of harmal seeds in half a liter of water. The boy drank one glass of this infusion in the morning and left for school. Arriving at school, he became sick, vomited, presented blurred vision and lost consciousness. An ambulance was called and he was transferred to the emergency department where he presented drowsiness and respiratory acidosis with hypercapnia (pH 7.27, pCO₂ 60 mmHg). The electrocardiogram and hemogram were normal. The poison control center was contacted and proposed medical observation with a second arterial blood gas test and another electrocardiogram after intravenous therapy for fluid volume replacement. The boy received the proposed therapy and recovered during the day. The second arterial blood gas test in the afternoon was normal as well as the electrocardiogram, so he was discharged from hospital the same day. **Conclusion:** First of all, in our case, the parents used seeds of *Peganum harmala* to treat nocturnal enuresis. After a literature research we did not find nocturnal enuresis as an indication for this treatment. On the contrary, the MAOIs harmine and harmaline achieve the opposite effect: polyuria. Furthermore, his parents were not aware of the negative effects of their treatment, did not keep their son under surveillance and sent him to school, where he lost consciousness. As traditional medicines are used out of context today, people should be conscious of their effects, respect indications and be aware of side effects.

References

- [1] Moshiri M, Etemad L, Javidi S, et al. *Peganum harmala* intoxication, a case report. *Avicenna J Phytomed.* 2013;3:288–292.
- [2] Sadr Mohammadi R, Bidaki R, Mirdrikvand F, et al. *Peganum harmala* (Aspand) intoxication: a case report. *Emerg (Tehran).* 2016;4:106–107.