Acute *Datura Stramonium* poisoning in East of Iran - a case series

Mahnaz Amini¹, Hamid Khosrojerdi²*, Reza Afshari ²

**Abstract**

**Objectives**: *Datura Stramonium* (DS) is a common weed along roadsides, in cornfields and pastures and in waste areas. It belongs to the family *Solanaceae* and its toxic components are tropane belladonna alkaloids. It has been used voluntarily by teenagers for its hallucinogenic effect. The plant is named in Iran as Tatoore. Symptoms and signs of acute *D. Stramonium* poisoning usually are similar to anticholinergic syndrome. This study is done in order to clarify the status of this poisoning in our region.

**Materials and Methods**: This study is a case series on all patients admitted to Imam Reza Hospital, Mashhad, Iran, with acute *D. Stramonium* poisoning between 2008 and 2011. We observed their symptoms, signs, routine laboratory test results and treatment used to control their symptoms.

**Results**: There were 19 patients included in our study. Children were poisoned more commonly than teenagers and poisoning in adults was rare. All of the children ingested the plant accidentally. The most presenting symptom was irritability and the most common sign was sinus tachycardia. There was not any presentation of seizure or coma. Most of the symptoms were controlled by parenteral benzodiazepines and there were no need to use of cholinergic agents such as physostigmine.

**Conclusion**: Our study showed most of *D. Stramonium* poisoned population in our region are children. We suggest decreasing accessibility to the plant in order to decrease the incidence of its poisoning.

**Keywords**: Alkaloids, Atropine, Cholinergic Antagonists, *Datura Stramonium*, Poisoning

¹- Lung and Tuberculosis Research Centre, Mashhad University of Medical Sciences, Mashhad, I. R. Iran
²- Department of Toxicology, Imam Reza Hospital, Mashhad University of Medical Sciences, Mashhad, I. R. Iran

*Corresponding Author*: Tel: +985118022620  
E-mail: khosrojerdih891@mums.ac.ir