

ORAL PRESENTATIONS

[ID-O#126] Acute Diazinon poisoning in children as a consequence of head and body wash: A new health problem and challenge in Romania

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Background: Diazinon is a cholinesterase-inhibiting insecticide that can produce severe even fatal poisonings in children. Washing with Diazinon solutions to remove or to combat pediculosis or scab is an usual practice in rural areas in Romania and other Eastern European countries. All pediatric units in Romania reported this year a significant increase of poisoned cases as a consequence of this practice. The purpose of this paper is to assess the clinical particularities, evolution and treatment in children with Diazinon poisoning produced by head and body wash admitted in the main pediatric poison center in Romania.

Methods: This is a retrospective study in the first six months of 2024 (January-June), including patients aged 0-18 years admitted for acute Diazinon poisoning as a consequence of head and body wash. Medical record analyzed included demographic, clinical and treatment data.

Results: 24 patients were admitted during this period, with a mean age of 9.7 years and 16 cases (66.66%) belonging to a cluster. The mean length of hospital stay was 6.58 days. 18 cases (75%) were from rural areas. Clinical signs included coma (30%), vomiting (62.5%), acute pulmonary edema (33.33%), and seizures (20.83%). There was an average serum cholinesterase level of 0.57kU/L. 10 cases were admitted to intensive care unit out of which 7 required mechanical ventilation. Children received high doses of atropine the mean dose being 372 vials. All patients survived. Low cholinesterase levels were correlated with neurological symptoms: coma and seizures ($p=0.015$) and the need for intubation ($p=0.014$).

Conclusion: Cutaneous exposure to Diazinon as a consequence of head and body wash can produce very severe poisoning in children. The significant increase of case number in a short period and the appearance in family clusters became an important health problem and a challenge for the poison center.