

Clinical presentation and laboratory findings related to the prognosis of Aluminium phosphide poisoning who referred to Ardabil'S Emam Khomeini hospital

Abstract

Objectives: Using of aluminum phosphide in multiple countries especially in north of Iran, with the name of rice tablets, for storage of rice and other grains in stores and for prevention of destructive effects of insects is increased and that is because of its low price and availability. As we know, there is no effective antidote for treatment of this kind of poisoning and its mortality rate is high, therefore we decided by cognition of clinical features, laboratory finding, clinical process and prognosis of this poisoning, supplying diagnostic and therapeutic procedure needed.

Methods: With a sectional-descriptive study, all patients with aluminum phosphide poisoning that referred to Ardabil's Emam Khomeini hospital during ۱۳۸۴-۱۳۸۹ was studied. Data were collected with questionnaire and analysed with Spss software.

Results: In this study, ۱۳۰ patients with aluminum phosphide poisoning from Farvardin of ۱۳۸۴ to Farvardin ۱۳۹۰ were studied that ۵۲,۳% were women and ۴۷,۷% were men. Age mean was $۲۴,۵ \pm ۸,۵$ and the time duration from using the tablet to treatment was $۴,۸۹ \pm ۵,۷۵$ hours. The mean numbers of rice tablet used was $۱,۴۴ \pm ۱$ and with increasing of the dosage, the mortality rate was increased. ۹۷,۷% of patients used rice tablet in oral way, ۵۰% of patients had nausea and vomiting. Clinical and laboratory findings, decrease of diastolic blood pressure, PH and bicarbonate and the increase of heart rate, respiratory rate and WBC count relationship with the mortality rate. The mean of bedridden during in ICU and hospital was $۲,۵۶ \pm ۱,۶$ and $۲,۹۳ \pm ۲,۲$ respectively and finally ۲۷,۷% of patients were died.

Conclusion: the increase of heart rate, respiratory rate, WBC count and decrease of GCS, systolic blood pressure and bicarbonate, relationship with the mortality rate of patients with aluminum phosphide poisoning.

Key words: Prognosis, Poisoning, Aluminum phosphide.