

Study of effect Gadim's poison (*Hemiscorpius lepturus*) on the leucocytes and their subgroups in rat blood

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Background and Aims: Hemiscorpius Lepturus which is known as Gadim is the most dangerous scorpion in khuzestan and in all world. In some poor areas of the province, khuzestan, scorpion poison is the fourth cause of mortality after gastroenteritis, respiratory infection and malnutrition in children. Researches have showed that Gadim's poison may damage all vital organs. In this study the effect of Gadim's poison was investigated on the leucocytes and their sub types of rat blood.

Methods: This experimental study was conducted on 40 Mole N-MARI rats. The rats were randomly divided into two large groups based on the dose of scorpion poison they received. Then, for sampling, each of them was divided into four groups of five each, based on the time after poison injection. Gadim's poison was dissolved in distilled water with different concentration (0.01 mg/ml and 0.1 mg/ml) was injected. The number of leucocyte and their sub-populations were counted after 2, 6, 24, 48 hours and their change were compared with control group.

Results: Result indicated that poison could reduce the number of white blood cells in a dose dependent manner. However such reduction was more pronounced after 2 and 6 hours in WBC and neutrophil. 6 hours after poison injection change in WBC number were near to normal value.

Conclusions: It can be concluded that Gadim has more adverse effect on few hours after poisoning and detoxification must done as soon as possible.

Keywords: Gadim scorpion; Poison; Leucocyte