#1999 - Serological, histopathologic and scintigraphic assessment of Hemiscorpius lepturus venom effects on renal dysfunction in rats	
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Body	**Introduction:** *Hemiscorpius lepturus* is one of the most dangerous scorpions of Iran leading to acute kidney injury (AKI) in minority of cases. The purpose of this animal study was to evaluate the predictive potential of scintigraphic method in acute kidney injury due to envenomation as soon as possible. **Methods:** In two groups of animals each contained three rats, *Hemiscorpius lepturus* venom (1200µg/Kg) were injected intravenously via tail vein. At three hours and one week later, 99m TC-DMSA (3mCi) was intravenously injected and renal scintigraphy were performed after an hour. Moreover, plasma levels of creatinine, sodium, potassium and blood urea nitrogen were measured. At the end of the study, renal tissues were excised and prepared to perform pathological evaluation after Hematoxylin and Eosin staining. **Results:** All serological indices remained unchanged compared to control. Large number of glomerular fibrin thrombi with entrapped red blood cells and simplified tubular epithelium in dilated and ectatic tubules were seen in high power field (×100) four hours after envenomation, which reduced significantly one week later. In our scintigraphic study, there was a statistically significant differences ($p<0.05$) in kidney count rate per pixels (CRPP) in both acute and chronic phases compared to the sham group received normal saline (0.84±0.05 and 1.36±0.07 versus 1.7±0.05). **Discussion:** It seems that serological parameters as the

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	feasible indices could not be used to predict AKI in animal studies. On the contrary, for the first time, the results of this study introduces renal scintigraphy as an exceptional method to predict the occurrence of the AKI in *Hemiscorpius lepturus* envenomation.
References	
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