HISTOPATHOLOGICAL CHANGES INDUCED IN RAT ORGANS BY THE VENOM OF \textit{HEMISCORPIUS LEPTURUS} (SCORPIONIDA: HEMISCORPIIDAE)

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ABSTRACT – \textit{Hemiscorpius lepturus} is the most dangerous scorpions specious in Iran. This scorpion is characterized by its cytotoxic and hemolytic venom. Envenomed peoples show swelling, erythema, echymus and severe systemic hemolysis, hematuria and renal failure and they may die from cardio-respiratory arrest or renal failure. There is little information about the histopathological effect of the \textit{H. lepturus} venom. In this study the histopathologic changes of rat organs following experimental envenomation by \textit{H.lepturus} venom were determined. Rats which were injected subcutaneously by sublethal dose of \textit{H.lepturus} venom, showed ulcer and necrosis at the site of inoculation and also histopathological changes in organs such as liver, spleen and kidney. Pathological changes in liver were more than other organs. The pathologic alterations in the liver were focal necrosis, hemorrhage, mild to severe congestion, sinusoidal congestion and vessel congestion. \textit{H.lepturus} venom also induced hemorrhage and congestion in kidney and spleen of rat. The histological alteration observed in rat organs in this study correlate with those observed in clinical cases.

Key words: \textit{Hemiscorpius lepturus}, venom, histopathology, cytotoxic, hemolytic, rat.