

## **Letter to the Editor**

### **The First Report of the Dangerous Scorpion *Hemiscorpius acanthocercus* from Hormoz Island in the Persian Gulf**

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#### **Dear editor**

The genus *Hemiscorpius* of scorpions belonging to the family Hemiscorpidae is among the most dangerous scorpions in Iran. Different species of this genus were reported from the western and southern regions of Iran (1, 2). So far, death cases due to sting of two species of *Hemiscorpius*, including *H. lepturus* and *H. acanthocercus*, have been reported in Iran (3, 4). The venom of these scorpions causes severe hemoglobinuria and acute renal failure in the victims (5).

The body coloration of *H. acanthocercus* is bright to dark yellow. Pedipalps are bulky and stout. The tip of fingers is brownish. The metazoma segment in males is elongated and slender than in females (Fig. 1). The maximum size of females is 53.0 and males is 60.0 millimeter. These specifications help doctors to identify this dangerous scorpion.

**Keywords:** *Hemiscorpius*; Scorpion sting; Renal failure; Hemoglobinuria; Iran

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**Fig. 1.** Dorsal view of *Hemiscorpius acanthocercus*, female (left) and male (right), scale in mm.

It is considered as one of the main agents of scorpion sting in patients with acute renal failure and severe hemoglobinuria (results in red to brown urine color) in these regions. The sting of this scorpion is painless. This leads to the patient's lack of attention, and as a result, the patient does not usually go to health care centers immediately. Generally, signs and symptoms of envenomation in these patients appear after several hours to days (up to 10 days). The delay in visiting health care centers causes severe complications and even death in victims.

Also, due to the absence of clinical symptoms and signs (laboratory evidences) during the first hours of sting, if the physician does not know about the recognition of the scorpion type, the discharge of the patient is a correct decision that will have irreparable consequences for the patient. Therefore, physicians should consult with a toxicologist or scorpion experts in order to ensure the correct implementation of the treatment process of scorpion sting victims.

The island of Hormoz with a population of 7000 is about 42 square kilometers. Its climate is warm and humid. During the summer months the temperature can rise to over 43 °C. Hormoz Island is one of the most popular tourist destinations in the province of Hormozgan in the south of Iran. In recent years, tourism has boomed on this island.

So far, the scorpion studies have not been carried out on this island. This is the first report of the identification of *H. acanthocercus* danger from the island of Hormoz.

Considering the importance of the

mentioned issue, the establishment and introduction of high risk areas for the presence of dangerous species of scorpions will be great help for the attention of the health care personnel to the scorpion- stung patients in these areas.

#### Authors' Contribution

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#### Conflict of Interests

The author has no conflict of interest

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