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Although it is common knowledge that many plants contain psychoactive substances, the fact that certain animals also do is barely known. The use of various insects as substances of abuse is interesting and has not been reported in detail in medical literature. We would like to illustrate two cases of animals used

Unconventional substances of abuse: Scorpions and lizards

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Although it is common knowledge that many plants contain psychoactive substances, the fact that certain animals also do is barely known. The use of various insects as substances of abuse is interesting and has not been reported in detail in medical literature. We would like to illustrate two cases of animals used
for their psychoactive properties and a brief review is provided.

A 60-year-old man with a 35-year history of heroin dependence was admitted for detoxification. On detailed evaluation the patient admitted to using scorpions on many occasions when heroin was not available. He described a distinct pleasurable effect of the sting that was more potent than heroin. He experienced an instant rush and would feel relaxed and would be under its effects for almost six hours. The patient used to collect the scorpions from the crevices in the rocks and would make it sting his hands before disposing them. He did not report any hallucinations or loss of consciousness any time during his sojourns.

A 35-year-old man with a 15-year history of heroin use was imprisoned for alleged illegal activities. While serving his term, the patient shifted his drug of use to lizards due to non-availability of heroin. He would catch lizards pull out their internal organs and burn them. He would later take the charred remains and fill them in a cigarette and inhale deeply. He claimed instant high on this substance and claimed it to be as pleasurable as heroin. On his release from the prison he continued using heroin. Both the patients were assessed for any psychopathology and did not have any co-morbid psychiatric illness.

Scorpion venom contains low molecular weight basic polypeptides, neurotoxins that are the principal toxic agents. These toxins act on ion channels, promoting a derangement that may result in an abnormal release of neurotransmitters. The release of serotonin caused by the poison may be the reason for the pleasurable feeling associated with the poison. The effects of poison on the sodium-potassium pumps in the nerves may also explain these effects. The acute effects of scorpion envenomation include extreme anxiety, pain at the bite site, acute renal failure, myocardial toxicity, left ventricular dysfunction and pulmonary edema. Agitation, seizures, squint, miosis, mydriasis and coma are the acute neurological manifestations of toxicity. Literature is sparse on the long-term effects of these toxins in humans.

Other creatures that have been used for their psycho-active properties include fish, wasps, toads, snakes and even human body parts. Newspaper reports are available of rising scorpion sting use in Gujarat, India for their psychoactive properties. The practice of medicine is made interesting by these occasional cases and in addiction medicine some patients never fail to surprise you.

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