Short Communication

Snake Venom - The New Rage to Get High!

Vijay Kautilya*, Pravir Bhodka

ABSTRACT

The insatiable craving of mankind for mind-altering substances is affirmed by the fact that newer drugs have continuously been evolving over centuries. A recent strange trend in India is snake venom abuse for getting a "high". At least four cases have been authentically reported, though drug peddlers caught selling such venom in rave parties and snake dens is relatively rare.

This paper reviews some case reports and tries to highlight the gravity of the problem in India. It attempts to analyze the legal and cultural flaws which have influenced the rapid and silent rise of this novel and dangerous form of substance abuse.

Key Words: Snake venom; Rave party; Mind altering substance; Substance abuse

Introduction

Man has always been fascinated and attracted towards the idea of "freedom from reality" and to be able to venture into an enchanting world of dreams. This quest of mankind in a way has led to the discovery and abuse of a wide variety of mind altering psychoactive substances through generations. The fact that trafficking of such illicit substances is the third most lucrative trade in the world only after fuel and weapons trade affirms the drive of man towards an altered state of mind for pleasure.

There are a wide variety of natural and synthetic substances derived from various sources which are known to satisfy this purpose. Some of the most exotic and dangerous of such substances originate from animal sources. It has long been known that the Colorado river toad (*Bufo Alvarius*) produces toxins with mind-altering capability. Its skin is licked directly, or its secretions are dried and smoked in South America, where it is commonly known as black stone, love stone, hard rock etc. "Chan sui" a Chinese medicine used as aphrodisiac, is known to contain toad skin extracts. Similar abuse of bees, cantharides, scorpions, and fish for psychoactive effects has been occasionally documented. The Arabic speaking Humr people of Sudan are said to use "umm naylokh", a preparation from giraffe liver and bone marrow for its hallucinogenic effect.

A relatively new and dangerous practice is now taking hold on the youth of India, though very few cases have so far been reported. The abuse of snake venom as a means to get a "high" among thrill-seeking addicts is on the rise in some parts of India. Snakes have long been associated with a lot of myths and religious interest in various cultures. Legends speak of Chanakya having given small doses of poison to Chandragupta Maurya to make him immune to it. "Snake vine" (pinyin) is an alcoholic beverage produced by infusing whole snakes in rice wine or grain alcohol. It has been a popular drink in China, Vietnam, for ages.² But this new method of getting a "high" through a venomous bite is certainly a more dangerous practice.

Only 4 cases have so far been scientifically reported in our country, though the practice is said to be far more

Dept of Forensic Medicine & Toxicology, Shri Sathya Sai Medical College & Research Institute, Ammapettai, Chennai 603108.

*(Author for correspondence): Email: kautilya.dactroo@gmail.com

common. Two cases of abuse of snake venom to get a high were reported by Md Zia ul Haq et al in Ranchi.³ Both were chronic heroin addicts who took to snake venom as an alternative to heroin. Two more cases were reported by Pradhan et al in Mumbai. Here the addicts were young adults who were abusing heroin, tried snake venom to get an extra "kick".⁴ These four cases reported are perhaps only the tip of an iceberg, as news of drug peddlers being arrested with bottles of snake venom in major cities is becoming a common phenomenon.

In September 2007, a forest vigilance team arrested a gang in Wayanad district of Kerala for selling snake venom. In another incident, forest officials arrested three people in January 2008 with 22 grams of snake venom crystals worth around Rs.660,000 at Kannur, around 500 km north of Thiruvananthapuram in Kerala. They were selling dried and desiccated snake venom crystals at Rs 30,000 per gm.⁵ In August 2009, the anti-narcotics squad arrested a person who was carrying two litres of snake venom, stated to be worth about Rs 15 crore in the international drug market, at Changanaserry, Kerala.⁶ The Circle Inspector involved in this raid stated, "For extracting one litre of snake venom, around 3,000 snakes have to be killed. Snakes are reared for this purpose in remote villages in states like Tamil Nadu and Andhra Pradesh. We handed the accused to the forest department since we cannot book him under The Narcotic Drugs and Psychotropic Substances Act of 1985. Cases relating to snake venom do not come under its purview. Perhaps, when the Act came into force, nobody thought that snake venom would be abused. But snake venom is now rampantly being abused as a drug. One or two drops are injected for intoxication."

In August 2010, two men were arrested for attempting to illegally sell cobra venom in Adarsh Nagar in northwest Delhi. About 285 grams of venom kept in two bottles worth more than Rs 1.5 crore were seized from them.⁷

In October 2011, snake venom was seized in Mumbai and Thane, leading the police to suspect that a new syndicate dealing in the poison had emerged, as perhaps demand from drug addicts had grown. Also, a litre of snake venom worth Rs 40 million, near Sion in Central Mumbai was seized. Heroin addicts, who have virtually no space left on their limbs for injecting the drug, are known to induce snakes to bite on their tongues.⁸

On January 30, 2012 two foreign nationals were caught by customs officials at Cochin airport trying to smuggle 16 condoms filled with a fluid later proven to be snake venom. They estimated that it would sell at 400 Rs/gm in the international drug market. Of late, every year, the newspapers are beginning to report traffickers being arrested with loads of venom to be sold in the drug market. This is an indirect marker indicating the ramifications of the problem.

Discussion

The choice of a particular substance of abuse is determined by a number of factors, including the personality profiles, socio-cultural milieu, availability and accessibility of the substance and co-morbid psychopathology. Certain types of addicts share certain personality traits and seem to have been born with high levels of impulsiveness and thrill seeking. In fact, people who are excited by the chance of receiving a potentially lethal snake bite share are few things in common. Predisposing factors for snake bite seekers probably include a tendency to have already used a wide range of substances, a tendency to seek high-sensation experiences as a result of personality traits (openness, extraversion and neuroticism), and a social and religious background which honours and worships snakes in mythology.³

In all the four cases reported so far, the users were chronic addicts using many substances to gain a high and got introduced to snake venom from friends, and tried it solely to explore this novel and dangerous technique. As stated by one patient, he tried it in order "to experience the kick the other substances now lacked". These individuals gain access to snake bites either from nomadic tribesmen, or from snake charmers from the slums.³ But there is now increasing sophistication as more and more people are exposed to venom in rave parties where extracted venom is available for injection. If a snake is involved, the bite is usually taken over the toes, foot, forearm or if the snake is small, on the tip of the tongue. Cobras are preferred as they do not cause significant local symptoms. Heroin addicts were found to be more prone to liking snake venom. One of the users in fact preferred it over heroin. These individuals regularly visit "snake dens", as they are now referred to, for a bite. In these dens, various types of snakes in different sizes and colours are kept. According to the type of snake bite, they are generally graded as mild, moderate and severe form of intoxication. A sharp tap with a blunt instrument is given on the snake's head. On tapping, the snake bites on the site.

This is felt as a pricking sensation locally, resembling the prick of an intramuscular injection lasting for 10-40 seconds.⁴

Various symptoms have been described by these addicts from such a practice: analgesic effect, blurred vision, dizziness, euphoric effect, lethargy, muscular paralysis and sleepiness. Most addicts prefer it for the euphoric effect. One user described heightened arousal and a sense of well-being lasting a few hours; a more intense state of arousal than he would experience with pentazocine injections. None of the users however developed a craving for snake bite, nor did they sustain any local injuries due to envenomation.

The absence of any local tissue injury apart from the bite mark, the wide distribution and easy availability of elapids especially with snake charmers in India, and the symptoms experienced by most abusers, all point to a neurotoxic nature of envenomation. It is also suggested that some of the neurotoxins result in a centrally mediated opiate-independent analgesia through the acetylcholine receptors and can substitute morphine and mitigate opioid withdrawal. As already known, these receptors mediate the rewarding or euphoric experiences associated with substance abuse. Mediation occurs through the mesolimbic dopaminergic system. Further studies need to be done to affirm this hypothesis.

Legal Issues: The Narcotic Drugs and Psychotropic Substances Act of 1985, which is the primary law governing and regulating the illicit trade of psychotropic drugs in India does not cover this peculiar problem as the list of narcotic and psychotropic substances mentioned in the act does not include snake venom. 10 Drug peddlers who get arrested can only be tried under the Wild Life Protection Act 1972, which primarily is intended to protect wild animals. The police department does not have direct jurisdiction in this matter, and cases have to be handled by the forest department. Snakes are classified as wild animals, and hence rearing, milking and sale of the venom is banned without a license under the Wild Life Protection Act. Import or export of products made of snakes is prohibited. But the Act allows a few selected tribes such as the Irulas who are traditional snake catchers in Tamil Nadu, to extract snake venom and sell it to licensed labs for preparing anti-venom against venomous snakebites. In Maharashtra, the Ministry of Forestry has agreed to allow even snake rescuers to milk and sell venom for their livelihood to the extent of milking 8000 snakes per year. These are troubling facts which serve to boost illicit trade in snake venom, as the value of venom in the drug market is now very high, and keeping track of the Irulas and snake rescuers will be an increasingly difficult job.

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