POISONING DUE TO DATURA – A RARE CASE REPORT

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ABSTRACT

An unknown person in the dress of 'sadhu' (sage) offered "prasad" to a man aged 35 years, who was travelling in train. Consumption of "prasad" caused him stupor and drowsy and later he was robbed. The investigation revealed the presence of datura in "prasad". Here, a non-fatal case of accidental poisoning of datura in a male aged 35 years is presented along with a brief description about the management and literature review regarding datura poisoning.

Key words: *Datura, accidental poisoning, prasad, sage.*

INTRODUCTION

Datura is a wild plant grown all over the country especially in wasteland. The common names include Jimson weed, Thorn apple, Stinkweed, Angel's trumpet, Jamestown weed. It belongs to Solanaceae family. Indian species include Daturafastuosa, Daturaatrox and Daturametel. There are two varieties of daturafastuosa – Datura Niger (purple flowers) and Datura Alba (white flowers).

Datura mainly contains the tropane alkaloids atropine, scopolamine, and hyoscyamine. Uses of datura have long histories of hallucinogenic use and have been connected with sorcery, witchcraft, native medicine, and magico-religious rites dating back to 1500 BC and Homer's *Odyssey*. (Homer's use of the plant *moly* as an antidote to Circe's poisonous anticholinergic drugs may have been the first recorded use of an anticholinesterase to reverse central anticholinergic intoxication). Chinese herbal medicines containing tropane alkaloids have been used to treat asthma, chronic bronchitis, pain, and flu symptoms. In Mexico, *Datura* is taken by Yaqui women to lessen pain of childbirth. In Africa, a common use is to smoke leaves from *Datura* to relieve asthma and pulmonary problems. Many cultures worldwide add plants with tropane alkaloids (particularly *Datura* species) to alcoholic beverages to increase intoxication. Recently, *Datura* has been used as a recreational hallucinogen in the US, resulting in sporadic cases of anticholinergic poisoning and death [1].

CASE REPORT

Man aged 35 years, bread winner of the family while travelling in train was offered "Prasad" by an unknown person in the dress of 'sadhu'(sage) at 8 am on 20-04-2014. The man consumed "prasad" immediately with due respect to sage. The ingredients of Prasad were crushed 'peda' (sweet), ground nut seeds and sugar crystals. After about 1 hour he started complaining giddiness, vomiting & he was in stupor, drowsy condition. Later he was robbed by this same sage.

Immediately he was rushed to the Casualty our hospital (KLE s Dr. Prabakhar Kore Hospital and Medical Research Centre). Initially, the CMO thought it as alcohol case but on enquiry with his attendants gave the history of consumption of 'Prasad". Consistent with the history, he presented with typical signs and symptoms of datura poisoning, which was more marked in him. He gradually improved clinically and survived with gastric lavage & neostigmine in recommended doses. The gastric lavage sample was subjected for

analysis at Poison Detection Centre, attached to the Dept of Forensic Medicine & Toxicology, Jawaharlal Nehru Medical College, Belgaum which revealed the presence of datura in the gastric lavage sample. The case was booked under S. 304 (A) and 328 IPC and investigation by Railway Police revealed that the so called self-styled sage was known for such malicious acts (incidents). The perpetrator is absconding till date.

DISCUSSION

Datura is a wild plant grown all over the country especially in wasteland. The common names include Jimson weed, Thorn apple, Stinkweed, Angel's trumpet, Jamestown weed. It belongs to Solanaceae family. Indian species include Daturafastuosa, Daturaatrox and Daturametel. There are two varieties of daturafastuosa – Datura Niger (purple flowers) and Datura Alba (white flowers). Leaves are dark green with pointed margins, and the flowers are bell shaped or tubular. The fruit is spherical in shape, green in color, covered with multiple thorns and contains numerous reniform seeds. They bear a superficial resemblance to chilly seeds but are large, brown colored, kidney shaped, surface is pitted with odorless, bitter to taste. All parts of the plant are poisonous. Seed is the most toxic constituent and contains the following active principles – Hyoscine (Scopolamine), Hyoscyamine and Atropine. Datura is used as mydriatic, antispasmodic, pre-anesthetic medication and antidote for organophosphates and carbamates[2].

The clinical features are seen in 30 – 60 minutes after ingestion and may continue for 24 – 48 hours. They can be summarized in classic phrase – *'blind as a bat, hot as a hare, dry as a bone, red as a beet, and mad as a wet hen'.* The main features are dryness of mouth, nausea, vomiting, dysphgia, dilated pupils, diplopia, dry hot skin, drunken gait, dysuria delirium with confusion, agitation, and hallucinations, drowsiness leading to coma and death due to respiratory failure or cardiac arrhythmias. Consumption of 50-100 seeds can cause death within 24 hours [3].

Treatment includes gastric lavage with tannic acid, 1% potassium permanganate solution. Activated charcoal can be administered. Physostigmine is the specific antidote. Pilocarpine is also useful. Purgatives and colonic lavage is also recommended. Artificial respiration or oxygen inhalation is given as and when required. Symptomatic treatment with intravenous fluids and supportive care are to be given [4].

Accidental poisoning is common in children. Suicide and homicidal cases have been reported. Most commonly used as stupefying agent and road side poison. Seeds are mixed with sweets and given to the unsuspecting victim. The drowsy or stupefied victim is robbed off his money or valuable articles [5].

CONCLUSION

Datura is criminally used (misused) as ideal road side poison. Another medico-legally significant aspect of the case is criminal use (misuse) of religious sentiments of people. Faith in God and religious sentiments of people of different religions seems to increase day by day. Blind faith in sage or sadhu and receiving Prasad from unknown persons are good examples of it. Thus Prasad is being mis-utilized for robbery and murders. Such events prompt the medico-legal workers to concentrate on medico-legal aspects of religion and also convey a warning to general population to be aware about such sage and Prasad and to limit their blind faith in activities in the name of religion or god.

It is used as a road poison. Travelers are the usual victims. Such poisoning is common during rail journeys. The modus operandi is as follows – a person in the guise of a 'sadhu' offers holy "Prasad" to the co-passenger. This 'sadhu' is the robber and his holy "Prasad" nothing but a sweetmeat mixed with datura seeds. The unwary and gullible public dare not refuse holy "prasad", but fall into this trap. They are later found unconscious, and their pockets have been picked by the 'sadhu', who was in the meantime got off at some wayside station. Hence one finds prominent notices in every railway carriage requesting

passengers not to accept food offered by strangers because it may be doped. The condition of the doped victim resembles one of drunkenness. And so when such a victim goes to either the police or the railway authorities to lodge a complaint that his pocket has been picked, nobody is inclined to believe him, mistaking him for a drunk. Such is the advantage of datura as a road poison.

Cigarettes made from the leaves of the datura plant used to be smoked in former days, for the relief of bronchial asthma. These were called stramonium cigarettes and caused bronchodilatation[6].

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