

REVIEW ON POISONING OF DHATURA

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An ancient Acharyas of Ayurveda has classified poisonous drugs into two types, i.e., Sthavara (plant origin) and Jangama (animal origin) Visha. Dhatura is described as one of the deliriant poisonous drugs. The poisons in the deliriant group are characterized by a well-marked deliriant stage. The poisons are; Dhatura, Atropa belladonna, Hyoscyamus niger, and Cannabis indica. Dhatura is commonly grown in wastelands all over India. Datura is well known and commonly used drug for treating various ailments, and it is an ingredient in most of the formulations in Ayurveda. There are 2 varieties; viz, Dhatura alba, a white flowered plant, and Dhatura niger, a black or purple flowered one. All parts of the plant are poisonous, but the seeds and fruits are more so. The active principle contains the alkaloids, hyoscyamine or traces of atropine. The synonyms of Dhatura are: Unmata, Kanaka, Kantakaphala, Kitava, Shivapriya.

Dhatura**Properties and Action**

Rasa : Madhura, Katu, Tikta, Kashaya

Guna : Guru, Ruksha, Ushna

Virya : Ushna

Vipaka : Katu

Karma: Kaphahara, Varnya, Madakari, Vishahara, Krumihara, Vranahara, Kanduhara, Bhramahara, Vamaka.

Dhatura Poisoning An individual if poisoned by Dhatura, then visual perceptions become yellowish (sarvam pashyathi peetakam) and develop symptoms like Kampa (tremors), Mada (intoxicated), Laala (excessive salivation), Chardi (vomiting), Smruthibhramsha (amnesia) and Bhrama (giddiness) etc.

They appear within half an hour if seeds are taken, or earlier, if a decoction of seeds are taken. ▪ The earliest symptom is a bitter taste in the mouth. Due to inhibition of salivation, there is dryness of the mouth and throat resulting in – difficulty in talking, dysphagia and thirst.

Face - flushed due to dilatation of cutaneous blood vessels.

The pupils are dilated, insensitive to light, and the power of accommodation for near vision is paralyzed.

The body temperature is raised.

Skin - dry and hot due to inhibition of sweat secretion and stimulation of heat regulating centre. Vomiting Giddiness and unsteady gait; the person staggering like a drunken individual. The mind is affected early, the

patient being at first restless and confused, and later becoming delirious.

He is subject to visual and auditory hallucinations. delirium passes off an hour and the patient become drowsy.

The drowsiness may progress to stupor or coma and rarely death from respiratory paralysis.

The important signs and symptoms can be summarized under Ds.

Dryness of mouth and throat
Difficulty in talking
Dysphagia
Dilatation of cutaneous blood vessels
Dilatation of pupils
Dry hot skin
Drunken gait
Delirium
Drowsiness

Fatal dose and Fatal period

May-June 2021 commonly encountered during a journey. This is about 100 to 125 seeds. The lethal dose for the alkaloids is about 60 mg for adult and 4mg for children. Death usually occurs within 24 hours,
Treatment of Dhatura Poisoning Ayurvedic Antidotes
Changeri swarasa internally
Administration of milk and sugar
Chandana mixed with tender coconut water for internal administration Haridra choorna

Karpasa patra swarasa (Gossypium herbaceum Linn.) and administer internally Mrunaala (stalk of lotus) kwatha or swarasa

Vamana / Stomach wash: the stomach should be evacuated to remove the remnants of the crushed seeds by a stomach wash with either a weak solution of potassium permanganate or 4 – 5 % tannic acid.

Virechana, Nasya

Physostigmine : dose of 1-4 mg

Neostigmine: 2.5 mg IV every 3 hours; acts as a physiological antidote.

Purgatives: are beneficial.

Diazepam – 10 mg IM

Pilocarpine – 15 mg Sub-cutaneous

Postmortem appearance

These are those of asphyxia. Dhatura seeds may be found in the stomach. There is congestion of the gastrointestinal tract. Dhatura seeds resist putrefaction and are found even when the body is decomposed. In rare cases mucous membrane of stomach may be found slightly inflamed.

DISCUSSION

The main of Ayurveda is prevent from diseases and cured from a disease. For that Ayurveda explains various treatment modalities and principles for maintaining a good & proper health. Agada Tantra is also known as 'Danshtra Chikitsa', where there is study of various Visha and its Chikitsa. Dhatura is one of the common and deliriant poisonous drugs explained in Ayurveda. Its signs and symptoms resemble to that of drunken person. It deals with various natural and artificial toxic substances and poisons in details along with their antidotes, the signs and symptoms and the management of poisoning resulting from the bites of snakes, insects, spiders, rodents etc. as well as from the combinations of various other poisons & fatal doses of various poisons. Datura stramonium (DS), known as Jimson weed is a wild-growing herb. The entire plant especially the foliage and seeds, is toxic due to its content of tropane alkaloids. The contained atropine, L hyoscyamine and L-scopolamine cause anticholinergic syndrome, which results from the inhibition of central and peripheral muscarinic neurotransmission. The main purpose or aim of the Dhatura poisoning is for robbery etc while in travelling. It is the most common type of poisoning used for robbery, kidnapping purpose. All parts of plant are poisonous but the seeds and fruits more so. The active principles of Dhatura contain the alkaloids, hyoscyne or traces of atropine. The Prabhava of Dhatura is explained as a Madaka. The important signs and symptoms have been summarized under the concept of 9D's. Vamana or Stomach wash is the basic Chikitsa in Dhatura poisoning and later purgatives are given for proper escape of poison from the body. It is sometimes known as a 'Road poison' as it is commonly encountered during a journey.

CONCLUSION

In Ayurveda, Agada Tantra is one of the important among the Ashtanga Ayurveda. Acharya Sushruta has also described that the various definitions according to Ashtanga Ayurveda. In which, Sushruta mentioned that Agada Tantra is the science of Sarpa, Kita, Luta etc. description of Visha is described. Various poisonous drugs are also mentioned in which Dhatura is one of the important common poisonous drugs which is specially used for the purpose of Robbery, kidnapping etc. Dhatura is commonly found in everywhere so it is easy to use for robbery, kidnapping / rape cases. It is one of the deliriant type of drug. The symptoms are described as "dry as a bone, red as a beet, blind as a bat, hot as a hare, and mad as a wet hen". In Ayurveda, Vamana or stomach wash is one of the important treatments for that.

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