

## AN OUTLOOK OF ACONITUM FEROX IN CONTEXT OF VATSANABH IN AYURVEDA

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### ABSTRACT

Vatsanabha or Mahavisha, *Aconitum ferox* is a species of monk's hood from the family Ranunculaceae is a deciduous perennial with tall and erect stems crowned by racemes of large eye catching blue, purple, white zygomorphic flowers with numerous stamens. Vatsanabha is also recognized as Vatsanaga, Ksweda, Visa and Amrita. A deciduous perennial plant, two to six feet high, 50 cms wide, belonging to family Ranunculaceae and rising in eastern temperate and sub-alpine areas of the Himalayas, eastwards of Uttarakhand, Nepal, Kashmir and Sikkim. All the parts of the plant are poisonous, the root existence most potent. The root is mostly used for medicinal purpose. As the synonym reveals, this toxic plant can also be useful as Amrita. The root of this plant is enormously poisonous but useful in the treatment of various diseases such as fever, rheumatoid arthritis, sciatica, hypertension and also act as a Rasayana after Shodhana. Acharyacharaka told that if vishadrava is taken in proper dose it act as Medicine while if drugs taken in more dose, it Act as poison. Formulations having aconitum roots as an ingredient are extremely effective in various diseases. If we give Vatsanabh or its preparation in the therapeutic dose, it acts as a medicine. Fatal doses of Vatsnabha root- 1gm, Extract or Juice of Vatsanabh- 250 mg & dose of Alkaloid- 4mg. If we are treating the patients by Vatsanabh, We should take care of patients. If any toxic symptom appears, the preparation encompassing vatsnabha should be instantly stopped and medicine to offset the toxic symptoms should be started instantly without any delay. The patient should also conscious and not to buying Ayurvedic medicine over the counter and start self-medication.

**KEYWORDS:** *Aconitum ferox*, Vatsnabh.

### 1. INTRODUCTION

Vatsanabha or Mahavisha, *Aconitum ferox* is a species of monk's hood from the family Ranunculaceae is a deciduous perennial with tall and erect stems crowned by racemes of large eye catching blue, purple, white zygomorphic flowers with numerous stamens.<sup>[1]</sup> Vatsanabha is also recognized as Vatsanaga, Ksweda, Visa and Amrita.<sup>[2]</sup> A deciduous perennial plant, two to six feet high, 50 cms wide, belonging to family Ranunculaceae and rising in eastern temperate and sub-alpine areas of the Himalayas, eastwards of Uttarakhand, Nepal, Kashmir and Sikkim. All the parts of the plant are poisonous, the root existence most potent. The root is mostly used for medicinal purpose. As the synonym reveals, this toxic plant can also be useful as Amrita. The root of this plant is enormously poisonous but useful in the treatment of various diseases such as fever, rheumatoid arthritis, sciatica, hypertension and also act

as a Rasayana after Shodhana.<sup>[3-5]</sup> Classically, Charaka has categorized Vatsanabha under Sthavara Visha, Susruta under Kanda Visha and Kaiyadevanighantu under Visha Varga.<sup>[6]</sup> The objective of this study is to review the state of knowledge of the drug as such along with its toxic effects on various systems, its shodhana and medico-legal importance.

**2. Vatsanabh Common name:** mithazahar, bish, bikh, monk's hood

**3. Botanical name-** *Aconitum napellus* — European variety

- *Aconitum columbianum* — American variety
- *Aconitum ferox* — Indian variety.

**4. General Features of Vatsanabh**

- Perennial plant with deeply cut leaves and long spikes of deep blue color flwers, with on upright

downy stalks The superior sepal of flower resembles a hood or helmet or cowl, hence the common name monkshood.

- *Aconitum ferox* variety found in India and grows in Himalayas.
- The root is stout and dark, conical and illustrations scars of broken rootlets, shriveled with longitudinal wrinkles. The root is about 5 to 10 cm long and 1.5 to 2 cm thick at upper end. The root may look like horseradish root. However, horseradish root is cylindrical and pungent.

**Toxic Parts:** • Root (more toxic) • Seeds and Foliage.

**Toxic Principles:** • Aconitine • Mesoaconitine • Hypoaconitin  
Pseudoaconitine • Ind-aconitine • Bikh-aconitine • Aconine.

**5. Collection of Vatsnabh Root:** The vatsanabh roots should be dug out when the fruits have ripened (thus indicating the stage of maturity in the life cycle of plant). The root should be fresh having dense internal structure and heavier. The root of choice should not be longer than 5 finger length, and not thicker than 1-2 finger girth thickness. The grading of superiority of the roots on the basis of their natural colour is Krishna and Kapisa is superior to Krishnabh and Pandura is Superior to both.

**6. Storage:** The Vatsanabh roots are recommended to be stored by wrapping in cloth wet with red mustard oil.

## 7. Vatsanabha Sodhan

### 7.1 Immersion in Cows urine

In first method, Vatsanabh being cut into bis by a sharp edged instrument in cow's urine. The urine is changed every day on two consecutive days and replaced by fresh urine. After 3 days the vatsanabh is collected and dried in the sun. In the second method Aconites roots cut into pieces are tied in cloth bundle, which is put in the sun. The urine is changed and replaced by fresh urine on two continuous consecutive days and the pot is put similarly in the Sun and after being rubbed in mortar, is stored for use.

### 7.2 Boiling in Cow urine

Vatsanabh taken in the quantity of 10 tola (115gm) tied in cloth bundle is suspended in Dolayantra full of cow's urine & boiled. Vatsanabh is purified by boiling in cow's urine for a Prahara (3 hour).

## 8. Mechanism of Action

- Aconitine acts on nerve axons by opening sodium channels. It also inhibits complete repolarization of the membrane of myocardial tissue causing repetitive firing.
- It stimulates vagal medullary center.

## 9. Metabolism

Metabolism of aconitum alkaloids is mainly carried out by the enzyme esterase. Aconitine is converted into

benzoyaconine through hydrolysis in C-8 position and into aconine.

## 10. Fatal Dose<sup>[7]</sup>

- 10.1 Vatsnabha root- 1gm
- 10.2 Extract or Juice of Vatsanabh- 250 mg
- 10.3 Alkaloid- 4mg

## 11. Dosage of Visa

- 11.1 Vatsnabha root- 500mg to 900 mh
- 11.2 Extract or Juice of Vatsanabha – 100mg to 200 mg
- 11.3 Alkaloid- 1-2 mg

## 12. Pharmacology & Therapeutics

**Rasa** – Madhur **Guna**–Ruksha, Tikshna, Laghu, Vyavayi, Vikasi

**Virya**– Ushna **Vipaka**– Madhura

**Prabhava**–Diaphoretic

**Dhatu effects**– Rasa, Rakta, Mamsa, Meda

**Organs Effect**- Stomach, Liver, Skin, Hea **Excretion** – Urine, Saliva, Gastric juice, Sweat, Bile

## Therapeutic Indications

Purified *Vatsanabhais* therapeutically indicated in the following health conditions:

- Fever
- Chronic fever
- Inflammation induced fever- like rheumatic fever
- Loss of appetite (rarely used unless fever, but beneficial during fever or illness for improving appetite).
- Splenomegaly
- Diabetes
- Respiratory infections
- Indigestion
- Poor digestion
- Asthma
- Cough
- Common cold

**13. Contra-Indication of Vatsnabha** All the food substance which aggravate pitta like usna (hot), pungent, sour, salty eatables should be avoided. It is contraindicated in pregnancy, lactation and in early childhood, patient of cardiac, liver, kidney and brain disease. It should be avoided in person with pitta symptoms like excessive thirst, hunger, anger, sun exposure. It should be avoided during summer and rainy season when there is chance of pitta aggravation. Vatsanabha can be absorbed through skin and it should be handled carefully. While consuming vatsanabh preparation one should follow abstinence and should consume cow milk, ghee, honey, sugar and rice

## 14. Clinical Features of Vatsnabh Poisoning

- Nausea and vomiting
- Salivation
- Tingling and numbness in mouth and lips
- Diarrhea
- Palpitation
- Weakness
- Hypotension
- Ventricular ectopics
- Arrhythmias
- Vertigo
- Blurring of vision, hippus, mydriasis, xanthops
- Convulsions.

## 15. Management

- Gastric lavage with activated charcoal
- Benzodiazepines for convulsions

- Symptomatic treatment.

Tankan (Borax) is supposed to be antidote of Aconite due to its Hrdya (Cardiac) effect. For this Tankan laahi should be given along with Gogharta (Cow's clarified butter).

- ii. Use of Goatmilk (Ajaadugdh)—According to Ayurved Prakash. In this therapy in the beginning use the emetics to induce vomiting and then use goatmilk until the vomiting stops. When the goat milk is retained in the stomach it indicates that the toxic effect of aconite is abolished.
- iii. Use of ArjunTwak, Churna along with Honey & cow's clarified butter.
- iv. Use of Juice of Tanduleeyak (Tandulja).

### Treatment According to Modern Science

#### (A) Use any of the following for gastric lavage

(1) Tannic acid (10gm in 2 liters of waters).

(2) Strong tea.

(3) KMnO<sub>4</sub> (1:1000)

(4) 0.2% KI (Potassium iodide) salutation.

(B) Cardiac monitoring in ICC unit

(C) Symptomatic Treatment

(1) For syncope give Injection Digitalin in 0.25 mg doses

(2) Due to vagal inhibition, there is heart failure. To overcome this, give Injection Atropine 1mg.

(3) For cardiac arrhythmia give 50ml of 0.1% Novacainelaw I/V.

(4) For collapse give I/V fluids.

**16. Autopsy Findings**• No specific findings• Organs are congested.

### 17. Medico legal Importance

1. Aconite is considered as near ideal homicidal poison, as it is sweet in taste and can easily be given with pan or other foodstuff.
2. Suicide
3. Accidental poisoning may occur due to mistaken with horseradish. On cut section, aconite appears pink whereas horseradish appears white
4. Root used to procure abortion
5. Arrow poison
6. Cattle poison
7. Aconite gets easily destroyed by decomposition and may not be detected in chemical analysis

### 18. CONCLUSION

Acharyacharaka told that if vishadrava is taken in proper dose it act as Medicine while if drugs taken in more dose, it Act as poison. Formulations having aconitum roots as an ingredient are extremely effective in various diseases. If we give Vatsanabh or its preparation in the therapeutic dose, it acts as a medicine. Fatal doses of Vatsnabha root- 1gm, Extract or Juice of Vatsanabh- 250 mg & dose of Alkaloid- 4mg. If we are treating the patients by Vatsanabh, We should take care of patients. If any toxic symptom appears, the preparation encompassing vatsnabha should be instantly stopped and

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