Adhatoda vasica-Therapeutic Monograph

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Introduction:

Vasaka is a common shrub distributed throughout India. In Ayurveda, the ancient system of Indian medicine it is commonly known as vasa. It commonly grows in waste places. The medicinal value of the medicinal herb has been mentioned in old texts. It is household remedy for various disorders. Charaka Samhita has classified the drug under mucolytic and expectorant drugs.

Classification:

Mucolytic.

Ayurvedic pharmacology

Taste: Bitter, Astringent.
Quality: Light, Unctous.
Post Digestion Effect: Pungent
Potency: Cold

Pharmacognosy

Adhatoda vasica belongs to family Acanthacrae. Leaves, flowers and bark found use in medicine.

A. Habitat

The plant is distributed in lower Himalayan range.

B. Botanical Identification

1. Vasaka is a dense pernnial shrub.
2. Leaves are of dark green colour above and pale yellow below. Flowers are typical, white arranged in pendunculated spike.
3. Commercial samples consist of dried drug consisting of leaves mixed with other parts.

Phytochemistry:

Alkaloids: Vasicine, and vasicinone.
Essential oil, coloring matter.
An organic acid (Adhatodic acid)

Standards

Sampling

Adhatoda is obtained from commercial sources or collected from open fields. Since it is easily identified, it is not difficult to get a genuine product.

A. Taste: Bitter
B. Fresh juice collected from flowers and aerial parts is of typical odour and consistency.

Powdered Adhatoda

1. Colour: Grey brown
2. Odour: Characteristic
3. Taste: Bitter
4. Positive for alkaloids

Extract

1. Colour: Light yellow
2. Nature: Alcoholic
3. Particle size of vasa powder for extract
4. Positive for alkaloids
5. Extract (prepared from dried leaf)

Strength 5:1
Total alkaloids NLT 0.5%
Ash value (app. 8%)
Moisture determination (8.46 approx)
PH 7-8

Pharmacology

1. Petroleum ether extract: Expectorant, and bronchodilator

2. Alcoholic extract: weakly antibacterial.

3. The alkaloids vasicine and vasicinone are potent bronchodilators.

4. In large doses vasicine is abortifacint.

5. Expectorant action is due to volatile oil. (In animal studies, it has been found that bronchodilator activity of vasicine is increased after administration of atropine. It has no marked action on alimentary canal and cardiovascular system).

6. Vasicinone, oxidation product of vasicine is more potent bronchodilator besides having anti-anaphylactic activity.

7. Vasakin a non-nitrogenous principle obtained from alcoholic extract is antidiabetic.

Therapeutics

In respiratory disorders like bronchial asthma and chronic bronchitis.

Toxicology

Adhatoda is contraindicated in pregnancy.

Dosage

1-3 G of dried leaves.

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