

World Journal of Pharmaceutical and Life Sciences WJPLS

www.wjpls.org



ROLE OF JATAMANSI IN ESSENTIAL HYPERTENSION

¹Dr. Twinkle Gupta and ²Dr. Jaswinder Kaur*

¹Associate Professor Department of Kayachikitsa, JIAR, Jammu. ²P.G.Scholar Department of Kayachikitsa, JIAR, Jammu.

*Corresponding Author: Dr. Jaswinder Kaur

P.G.Scholar Department of Kayachikitsa, JIAR, Jammu.

Article Received on 20/12/2017

Article Revised on 10/01/2018

Article Accepted on 31/01/2018

SJIF Impact Factor: 5.088

ABSTRACT

Hypertension is one of the major health problem which the society is facing presently. About 90 - 95% of cases are categorised as "Essential hypertension" which means high B.P with no obvious underlying medical cause. In Ayurveda, Jatamansi is believed to improve blood circulation and normalize the "Essential Hypertension".

KEYWORDS: Nardostachys Jatamansi, Essential hypertension, Sadamanjil, Jadamanjil, Blood pressure.

INTRODUCTION

Essential Hypertension

Hypertension, being a Chronic illness constitutes on important public health challenge.

In more than 90-95% of cases, a specific underlying cause of hypertension cannot be found.

Such patients are said to have essential hypertension.^[1]

The pathogensis of essential hypertension is not clearly understood.

Different investigator have proposed the Kidney, the peripheral resistance vessels and the sympathetic nervous system as the seat of the primary abnormality. [2]

Important environment factors include a high salt intake, heavy consumption of alcohol, obesity, lack of exercise and impaired intrauterine growth and a very little evidence that stress causes hypertension.^[3]

In India, 14% of people suffer from hypertension and majority of them have essential hypertension. It is estimated that 1 billion people are affected worldwide.

Modern style of living might have given man all comfort that he has craven for, but in the meantime in has a darker side too and increase the incidence of lifestyle disorders.

Definition of Hypertension

Category	Systolic Blood	Diastolic blood
	Pressure (mmHg)	Pressure (mmHg)
Blood pressure		
Optimal	< 120	< 80
Normal	< 130	< 85
High Normal	130 - 140	85 – 89
Hypertension		
Grade 1 (mild)	140 – 159	90 – 99
Grade 2 (moderate)	160 – 179	100 – 109
Grade 3 (severe)	≥ 180	≥ 110
Isolated Systolic Hypertension		
Grade 1	140 – 159	< 90
Grade 2	≥ 160	< 90

www.wjpls.org 170

Recent work has confirmed the relation of heredity and body type genesis of Essential Hypertension but it should be remembered that it must operate through pathophysiologic mechanisms, which must be recent observations have also confirmed that fact that is ageing and obesity.

"Jatamansi",[4]

Jatamansi consists of dried rhizome of Nardostachys Jatamansi, an erect perenial herb. [1]

Synonyms

Sanskrit - Mamsi, Jata, Jatila

English - Nardeus root, Spikenord, Muskroot

Hindi - Balchara Kashmir - Bhutijata

Punjabi - Billlotan, Balchhar, Chharguddi

Composition of Jatamansi $^{[5]}$

Kingdom - Plantae
Class - Magnoliopsida
Order - Dipsacales
Family - Valerianaceae
Genus - Nardostachys

Species - Nardostachys Jatamansi

Properties and Action^[6]

Rasa - Tikta, Katu Guna - Laghu, Tiksha

Virya - Usna Vipaka - Katu

Mukhya Karma

Sangya - Sthapana

Description

Types of plants and Native range

Nardostachys Jatamansi is a flowering plant of the honey suckle family.^[1] That grows in the eastern Himalayas primarily in a belt through Alpine Himalyas Kumaon, Sikkim and Bhutan^[2]

Height, Habitat and Flower^[1]

The plant grows to about 1m in height and has pink, bell-shaped flowers.

It is found in the altitude of about 3000 – 5000 meters^[1] Rhizomes can be crushed and distilled into an intensely aromatic amber – colored essential oil, which is very thick in constituency.

"Phytochemistry" [7]

The chemical components of Nardostachys Jatamansi have been assayed in a number of different studies.

These compound include.

- Acaciin
- Ursolic acid
- Octacosanol
- Ranshone A
- Nordosinone

- Oleanolic acid
- beta sitosterol

Role of Nordostachys Jatamansi in the management of Essential hypertension rock $stock^{[8]}$

In Ayurveda, the rhizome of Nardostachys Jatamansi is believed to improve blood circulation and normalizes the essential blood pressure.

Sixty patients of either sex in age group of 35 years to 75 years with essential hypertension.

Without any comorbid illness were given finely dried rhizome powdered of Nardostachys Jatamansi in the dose of 40 mg to 80 mg per kg body weight thrice a day with honey for 40-70 days.

The clinical efficiency to changes in systolic and diastolic blood pressure were assessed throughout the treatment.

At the end of the study, majority of the patients showed a highly significant response in ways of reduction in blood pressure.

Treatment with drug for 1-2 months produced significant improvement of systolic Blood pressure and diastolic blood pressure.

The result of the present study suggested that the usefulness of Nardostachys Jatamansi rhizomes in patients with essential Hypertension change in Systolic BP and diastolic blood pressure were analysed statistically by student's paired +- test.

On the first visit the mean SBP and DBP was 163.76 ± 1.21 and 100.84 ± 0.80 mm Hg respectively.

After 8 weeks of therapy there was a statistically extremely significant fall in SBP (Mean \pm SEM) 123.24 \pm 0.35 and DBP (Mean \pm SEM) 80.16 \pm 0.27 mmHg value (<0.05) considered as significant.

Dossage^[9]

Jatamansi root extract dosage

40mg to 80mg per kg body weight 2.4 to 4.8gm for 60kg body wt.

Children:- 4 to 8mg per/kg body wt.

Adult:- 250mg to 500mg

Jatamansi Cold infusion dosage

48gms of Jatamansi powder is mixing in 384gms cold water and left for overnight or for 12 hours.

Then liquid is strained and taken in the dosage of 96 ml. Preparation should be fresh and should be prepared everyday.

Jatamansi hot - infusion dosage

www.wjpls.org

It should be prepared from 4gms of Jatamansi powder and 240ml hot water.

The mixture of hot water and Jatamansi should be leaved overnight covering the vessel with lid and filtered in the morning. The same procedure should be followed for evening dosage.

Safety Profile^[10]

All preparation of Jatamansi are non-toxic and considerably safe when used in the time tested dosage recommended in ayurveda.

Side effect

Consuming excess i.e. more than 4 grams twice a day (or 8 gram per day) of Jatamansi can lead to:-

- Nausea
- Vomiting
- Diarrhea
- Abdominal cramps
- Frequent urination

CONCLUSION

To conclude the drug under trial has shown highly promising results in treating Essential Hypertension which should be assessed on larger population.

In Ayurveda, the rhizome of Jatamansi drug has wonderful effects on Essential Hypertension which is mentioned in Ayurveda text.

REFERENCES

- 1. Davidson's, 608-609.
- 2. The Ayurveda pharmacopoeia of India, I: 51-52.
- 3. Indian Medicinal plants, 433.
- 4. Pharmacognosy of Indegenous drugs, III: 1222.
- 5. Database, VIII.

www.wjpls.org 171