

## RAUWOLFIA SERPENTINA (AQUA) : A NEW APPROACH IN THE TREATMENT OF HYPERTENSION IN HOMOEOPATHY

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### Abstract

*Rauwolfia serpentina* belonging to family Apocyanaceae is a popular drug used in curing hypertension besides other ailments. This drug is commonly used as a mother tincture to relieve hypertension, but could not help alleviate the associated symptoms like sleeplessness, headache, palpitation, indigestion etc.

In the present study the efficacy of this drug administered in 1x potency in water has been studied clinically and pathologically in 52 patients suffering from essential hypertension. The drug besides controlling the raised blood pressure also brought down considerably the associated symptoms in some cases.

### Introduction

*Rauwolfia serpentina* commonly known as Sarpagandha is found throughout India, Burma, Pakistan, Thailand, Africa etc. In the 17th century this plant was described by a French Botanist and was named *Rauwolfia serpentina* in honour of German Botanist and Physician, Dr. Leonhard Rauwolf.

*Rauwolfia serpentina* was introduced in Homoeopathy by Dr. W. Templeton. The proving was conducted by the faculty of Homoeopathy at London. It is popularly used in insanity, hypertension, epilepsy, dysentery, diarrhoea, blindness, fevers and also as an antidote for insect bites and snake bites.

Siddiqui and Siddiqui found two groups of alkaloids namely ajmaline and serpentine, and studied their pharmacological action in lower animals. They state that ajmaline group acts as a general depressant to heart, respiration and nerves, whereas, serpentine group paralyzes respiration and depresses the nerves but stimulates the heart. Sen and Bose found it to be useful in lowering the blood pressure and also the respiratory rate

besides relaxing the plane muscles of small intestines and uterus. Further they have proved that the water extract of the drug when injected intravenously produced no appreciable effect, but was less irritant orally. Synthetic alkaloids of the drug used in modern medicine has been observed to produce serious toxic side effects like lethargy, depression, dyspnoea, cardiac failure, suicidal tendency, parkinsonism and even leading to breast cancer in women.

Ayurveda and Unani System of Medicine used this drug for Hypertension in their preparations. Earlier studies of this drug in Homoeopathy in the treatment of hypertension was by administration in the form of Mother Tincture. Hypertension is a disorder which requires prolonged use of the drug in its management. The conventional use of this drug on prolonged use in the control of blood pressure resulted in some deleterious side effects like sleeplessness, irritation, headache, palpitation, breathlessness, depression, indigestion etc. The present study is aimed at evolving a better way and mode of administration of this drug to minimise the emanating side effects.

### Material and Method

The effect of 1x potency of *Rauwolfia serpentina* in water (aqua) has been studied on 52 patients suffering from essential hypertension and were followed up for 5 years.

### Preparation of Drug

1 gm of *Rauwolfia serpentina* root powder and 3 gms of sugar of milk were taken in a clean porcelain mortar and triturated for 6 minutes, and scraped with a scapula for 3 minutes and mixed thoroughly for 1 minute. The same process was repeated for another 10 minutes. Adding 3 gms of sugar of milk this process was repeated for another 20 minutes (second time). Again the same

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process was adopted adding 3 gms of sugar of milk for the third time. Thus trituration was done for 1 hour to obtain 1x potency.

### Mode of Administration and Dosage

2 pinch of 1x potency in half cup of water orally was given to these patients. Initially the drug was given three times a day and after recording a fall in B.P. it was reduced to two times a day. Further after substantial fall in B.P. levels it was reduced to once daily. After recording the normal B.P. levels continuously for three months, the drug was withdrawn. But in some cases whenever the B.P. raised again the drug was resumed considering the level of B.P.

### Observations and Results

**Table-1**  
Distribution of Age & Sex

Sex	Age Group (Yrs.)				Total
	25-35	36-45	46-50	51 Yrs. & Above	
Male	0	11	2	8	21
Female	3	11	9	8	31
<b>Total</b>	<b>3</b>	<b>22</b>	<b>11</b>	<b>16</b>	<b>52</b>

**Table-2**  
Duration of Illness Prior to the Treatment

Duration of illness	No. of patients		
	T	M	F
1 month to 3 months	2	0	2
3 months to 6 months	6	3	3
6 months to 1 year	16	4	12
1 year to 3 years	16	6	10
3 years to 6 years	11	7	4
6 years & above	1	1	0

**Table-3**  
Improvement Indices

	Before Treatment (No. of Cases)			Found Effective After Treatment (No. of cases)		
	T	M	F	T	M	F

#### Subjective Symptoms

1. Headache	20	5	15	15	2	13
2. Giddiness	46	17	29	39	12	27

3. Palpitation	24	7	17	18	5	13
4. Tinnitus	8	2	6	5	1	4
5. Emotion						
(a) Poor	5	2	3	3	1	2
(b) Excited	10	3	7	8	2	6
6. Loss of appetite	15	5	10	10	3	7
7. Loss of weight	10	3	7	3	1	2
8. Tiredness	18	6	12	12	4	8
9. Sleeplessness	9	4	5	8	3	5

#### Objective Symptoms

1. Face swelling	6	2	4	4	1	3
2. Feet swelling	12	2	1	9	1	8
3. Sweating	11	4	7	7	2	5
4. Pulse (raised)	52	21	31	42	17	25
				Min. : 86 per min.		Min. : 74 per min.
				Max. : 96 per min.		Max. : 86 per min.
5. Blood Pressure (Raised)	52	21	31	42	17	25
Systolic				Min. : 150 mm/Hg		Min. : 130mm/Hg
				Max. : 180 mm/Hg		Max. : 160mm/Hg

#### Diastolic

Min. : 96 mm/Hg	Min. : 80 mm/Hg
Max. : 110 mm/Hg	Max. : 96 mm/Hg

#### Pathological changes

##### A. Blood

1. Blood Urea (Increased)	0	0	0	0	0	0
2. Blood Cholesterol (Increased)	4	1	3	1	1	0
				Min. : 296 mg/dl.		Min. : 192 mg/dl
				Max. : 310 mg/dl.		Max. : 290 mg/9
3. Total WBC Count (Increased)	12	6	6	9	3	6
				Min. : 14,000cu/mm		Min. : 5,600 cu/mm
				Max.: 16,700cu/mm		Max.:14,000 cu/mm
4. Hb (Decreased)	12	2	10	3	1	2
				Min. : 7.5gm%		Min. : 8.5gm%
				Max. : 9.5gm%		Max. : 14gm%
5. ESR (Raised)	19	7	12	10	2	8
				Min. : 24mm/1hr		Min. : 5mm/1hr
				Max. : 40mm/1hr		Max. : 40mm/1hr

##### B. Urine

1. Albuminuria	15	6	9	9	3	6
2. Pus Cells	18	5	13	10	2	8

#### Other Symptoms Relieved

1. Anginal Pain	2	1	1	2	1	1
2. Depression	5	2	3	3	1	2
3. Diabetes	2	1	1	1	0	1
4. Constipation	14	5	19	10	3	7

Initially the studies were conducted by Rauwolfia serpentina Mother Tincture (R.S.Q.) on 16 essential hypertensive patients of which 6 responded well in controlling raised blood pressure. But however, on prolonged use all of them developed some symptoms like depression, headache, sleeplessness, irritation, lethargy etc. Hence the drug (R.S.Q.) was discontinued. Then Rauwolfia serpentina 1x (Aqua) was given to the patients and on prolonged use it was observed that besides controlling the blood pressure it did not produce the above symptoms. In the present study 52 hypertensive patients were given Rauwolfia serpentina 1x potency in water. Of these, B.P. was reduced in 42 patients subsequent to treatment. 22 of these 52 cases reported were under allopathic treatment and they were asked to continue along with Rauwolfia serpentina 1x. Later with substantial fall in B.P. levels the allopathic drugs were tapered and slowly withdrawn.

The response of the drug was profound in patients in the age group of 36-45 years (Table-1). The associated symptoms like giddiness, anginal pain, diabetes, constipation were also relieved in some cases (Table-3). Pathological findings viz. blood cholesterol, ESR, total WBC count, and albumin in urine showed decrease in their levels (Table-3).

## Discussion

In modern medicine also the use of Rauwolfia serpentina for high blood pressure has become much reduced due to adverse side effects it produces on long continuous use. Each plant has some potent therapeutic or active principles. In Rauwolfia serpentina alkaloids are supposed to be the potent therapeutic substances. These alkaloids besides alleviating the target symptoms might produce some adverse side effects. The same plant contains some antitoxic agents also. This antitoxic agent which is left behind after the extraction of the alkaloids is presumed to be undescended in the mother tincture of the drug. Hence, when the drug as a whole is triturated to 1x potency, this antitoxic agent and the toxic effects of the alkaloids are balanced in giving no adverse effects on prolonged use.

Dr. Bhagwan Das in his book "*High Blood Pressure & Sleeplessness*" also has rightly pointed out this idea of balancing effect of the toxic and antitoxic agents contained in the drug.

Dr. Hahnemann during his last days has advocated in his *VI Edition of Organon of Medicine* the preparation of drugs through 50 Millesimal potencies. Here he has emphasised the trituration method upto 6 C and later obtaining higher potencies by using distilled water and alcohol. This method of Dr. Hahnemann, the founder of Homoeopathy points towards the wholesome nature of preparation rather than mother tincture as a base medicine.

Based on this logic the present study not only fulfills the objective but also upholds the classical doctrine of preparation and application of medicine in homoeopathy.

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