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## Role of homeopathy in the treatment of hypertension

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### Abstract

Hypertension (HTN) is the persistent increase in the blood pressure (BP) above the normal values. It is hazardous because it is associated with several health related complications like atherosclerosis, strokes, congestive heart failure, kidney diseases etc. The article aims in describing the role of homeopathy in managing HTN. The use of homeopathic remedies is rising in the modern area especially in chronic diseases like HTN and is proved effective in clinical practice. Managing cases of HTN in homeopathy is an art. However, more scientific research studies are needed to be done to validate the effectiveness, and explain the safety profile of homeopathic remedies for their antihypertensive potential.

**Keywords:** Homeopathy, hypertension, blood pressure

### 1. Introduction

Hypertension or high blood pressure is the by-product of modern civilization and it has become a “Silent killer” due to our modern stressful life. High BP is not a disease, but a manifestation or sign of internal malady or pathological process. The elevation in blood pressure is actually a compensatory or conservative process by which an adequate circulation of blood to the tissues is maintained, in spite of obstruction or increased resistance to the flow of blood. Hypertension is associated with various health related complications like arterial aneurysm, strokes, heart failure, heart attacks and kidney failure or can lead to death due to failure of circulation [1]. There are several conventional medicines to control high blood pressure as acetazolamide,  $\beta$ - blockers etc. However, these medicines have several side effects. So there is a need of alternative treatment to control and manage HTN. This review aims to describe role of homeopathy in managing hypertension.

### 2. Hypertension overview

#### 2.1 Definition

For adults normal blood pressure is 120/80 mmHg. It varies with age, sex and health condition. According to world health organization (WHO) criteria, hypertension is diagnosed when there is:

- Repeated higher blood pressure readings OR Sustained/persistent BP is termed as hypertension
- 3 high blood pressure readings on 2 consecutive health care visits
- Sustained systolic BP= >140mmHg
- Sustained diastolic BP= >90mmHg is considered to constitute Hypertension [2].

#### 2.2 Classification of Hypertension

##### 2.2.1 Types of hypertension on the basis of cause

1. Primary or Essential hypertension
2. Secondary hypertension

About 90 to 95% of HTN cases are primary in origin, having no specific cause or organic disease. The residual 5 to 10% of HTN cases, are caused by other conditions affecting arteries, heart, or endocrine system [3].

Congenital hypertension is due to some congenital defects or due to any genetic cause. Pregnancy induced hypertension is due to changes (endocrine changes, weight gain etc.) occurring in pregnant women [4].

##### 2.2.2 Types of hypertension on the basis of severity

Taking average of patient's resting BP readings (systolic and diastolic BP) on two or more occasions indicates the level of hypertension.

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Hypertension may be mild, moderate or severe. If the systolic or diastolic BP measurement is higher than the normal expected for that age is termed as pre-hypertension<sup>[5]</sup>. Different stages of HTN based on severity are described with BP readings in Table 1.

**Table 1:** Stages of HTN<sup>[6]</sup>

Stage I	Mild HTN	140-159/90-99
Stage II	Moderate HTN	160-179/100-109
Stage III	Severe HTN	180-209/110-119
Stage IV	Very severe HTN	>210/120

### 2.2.3 Other Types of Hypertension

#### 2.2.3.1 Isolated systolic HTN

It is common in elderly people with elevated systolic and normal diastolic blood pressure readings.

#### 2.2.3.2 Exercise HTN

It is an overly high BP during exercise, more than the expected range (systolic BP ranges between 200 to 230 mmHg). These patients are at risk of developing HTN even at rest.

#### 2.2.3.3 Resistant HTN

If blood pressure does not reduce even after antihypertensive medication<sup>[3]</sup>.

### 2.3 Predisposing factors of Hypertension

#### 2.3.1 Essential or Primary HTN (90-95%)

No direct cause has been identified yet, although it is closely related to some risk factors as given below:

(1) Advancing age, (2) Type A personality (active, highly ambitious, responsible, industrious, fastidious), (3) Hereditary (if one parent has hypertension 25% chances in children to develop HTN, if both parents have hypertension 60% chances in children to develop HTN), (4) Obesity (5) Addictions like smoking, excessive alcohol consumption, unnecessary intake of coffee and cocaine etc., (6) Hypercholesterolemia, (7) Nervous factors like temperament, emotional stress etc. (8) Increased NA<sup>+</sup> intake, (9) Drugs includes NSAIDs, oral-contraceptives, antidepressants etc. (10) Vitamin D deficiency, (11) Lack of aerobic exercise, (12) High fat intake, (14) Lack of sleep, (15) High blood sugar levels etc., can lead patient towards HTN.

#### 2.3.2 Secondary HTN

Generally develop secondary to some disease condition which may be:

(1) Renal disorders as Glomerulonephritis, Polycystic kidney disease, tumors etc. (2) Endocrine disorders as Pheochromocytoma, Cushing's syndrome, (3) Primary hyperaldosteronism, (4) Toxemia of pregnancy, (5) Neurogenic disorders, (6) Connective tissue disorders, (7) Coarctation of aorta, (8) Miscellaneous causes includes use of Oral contraceptives or Steroids, (9) Hypothyroidism (10), Hyperthyroidism (11) Adrenal gland cancer etc. predispose a person to develop secondary hypertension or established HTN.

#### 2.3.3 Malignant HTN

When the blood pressure exceeds more than 200/140 mmHg, is a complication of HTN is a complication of HTN and is considered as emergency condition because it is

related to various life threatening conditions<sup>[4, 7]</sup>.

### 2.4 Pathophysiology of Hypertension

HTN is the result of either increased cardiac output and/or increased peripheral resistance<sup>[3]</sup>.

Cardiac output is known to increase early in the disease course, with normal total PR. At time, cardiac output lowers to normal levels, but total PR is increased. The possible mechanisms for HTN includes: Failure of kidneys to excrete sodium, Over-activity of renin-angiotensin system, Sympathetic nervous system over-activity plus hereditary/genetic influence with contribution of three environmental factors: sodium, Stress and Obesity etc.<sup>[1]</sup>.

### 2.5 Clinical Manifestations

When a person present with headache or vertigo, he must be first suspected for high blood pressure and is then properly diagnosed for hypertension. Very often the patients present without any symptom even though their BP is very high. It is most of the times detected on routine medical checkup or while investigating for other symptoms. The body keeps on adjusting to high BP, hypertension is therefore called as a "Silent killer". Some patients come with vague symptoms picture like heaviness of head, vertigo, headache, dizziness, weakness, dim vision, lack of concentration, anxiety, dyspnea, palpitations etc. The patients taking antihypertensive medicines usually present with high systolic and low diastolic blood pressure. People also present with clinical features of some complications like stroke<sup>[5, 8]</sup>.

### 3. Homeopathic Concept for treatment of Hypertension

In Homeopathy, health indicates harmonious functioning of vital/life force and disease is considered as deviation from health, when the harmonious functioning of vital force is obscured. Homeopathy treats the sick individual, not only his sickness as stated in Hahnemann's writing "there is no disease, but sick people". Thus in case of primary/essential HTN, homeopathy is concerned with the patient having high blood pressure rather than the hypertension itself. It is the sick man who has to restore to health, not his tissues, not his body. It is the constitutional makeup (inherited or acquired) of an individual and the environmental influences (internal or external) that predispose a person to develop HTN. Thus the totality of various characteristic symptoms narrated by this patient and the peculiar signs leads the homeopath towards similar remedy that relieves the totality of symptoms and also the symptoms of increased blood pressure.

#### 3.1 Miasmatic influence

Miasms are the diathesis or constitutional states that determine the mode of existence and predisposition of an individual towards various chronic diseases. There are three basic miasms as narrated by Hahnemann which he believed to be the core causes of chronic disease. Thus an individual patient could be under the influence of one miasm, or combinations of them. For better understanding of the miasmatic influences in primary hypertension, one must role out its etiological factors, underlying pathology and from the clinical presentation of patient in general.

##### 3.1.1 Psoric predominance

Patients with psoric predominance are likely to have

hypotension or hypertension, caused by prolonged emotional disturbances like anxieties, anger, worries or grief etc., the blood pressure elevation subsides with the settlement of the above factors. The psoric element is associated with many sensations, modalities and concomitants reflect the true picture of the suffering. It is closely linked with heart trouble and could prove fatal <sup>[1]</sup>.

### 3.1.2 Sycotic predominance

The element of 'excess' is found in psychotic diseases. Hypertension is usually an expression of sycosis, here the coordination of body functions is lost and they become excess. A sycotic person is narrow-minded and the same narrowness of blood vessels leads towards HTN. Metabolic syndrome is actually a mixture of excess in different systems, as excessive fats deposition, hypertrophy of organs, accumulation of fluid in body, obesity etc. are all sycosis and are the leading causes of HTN. Pain in the precordial region radiates towards scapula or vice versa. The miasm is transmitted to next generation <sup>[1]</sup>.

### 3.1.3 Syphilitic predominance

The syphilitic influence in primary/essential HTN leads to destructive changes in vital organs like retina, brain, heart and kidneys. Most of the cases of secondary HTN and malignant HTN are syphilitic in origin. HTN due to congenital defects are also syphilitic in origin. These patients are prone to die suddenly without giving any warning <sup>[1]</sup>.

### 3.1.4 Pseudo-psoric predominance

Tubercular miasm reflects numerous subjective symptoms, the mental or emotional reactions of psora and pathological changes of syphilis. These patients wide range of fluctuations in BP, they often present with hypertension followed by an episode of hypotension and are prone to hemorrhagic manifestations as retinal hemorrhages, epistaxis etc. <sup>[1,4]</sup>.

## 3.2 Philosophical concept of Homeopathy for Management of Hypertension

The homeopathic management of essential HTN is based on the 'principle of similia'. Being a chronic disorder, it calls for constitutional anti-miasmatic treatment. It is the totality of various characteristics symptoms that guides the homeopath towards similimum. In Organon, aphorism 153, homeopathy stressed upon the importance of individuality of the patient. Hahnemann stated that it is the strange, rare, peculiar characteristic symptoms of an individual and not the common symptoms that indicate the similimum. Hahnemann also lays emphasis on the mental symptoms of patients in all physical disorders. He stated that the emotional reactions and mental disposition of a patient are to be particularly noticed as they often govern the remedy. This statement of Hahnemann is applied naturally to the cases of essential HTN as these are the psychological factors that are responsible for the causation of disease. When a disease with multiple miasmatic influences (like essential HTN) is treated, it is significant that the remedy selected corresponds to the prominent/ dominant miasm. Very often, it may be the dominant psoric miasm, afterward the prominent sycotic or syphilitic miasm, as manifested by the case picture itself call for appropriate change of remedy <sup>[1]</sup>.

## 3.3 Palliative approach of Homeopathy in Hypertension

Many of the BP patients continue to change physicians, moving from one physician to another, thus the treatment of patient with HTN is not less than a super mastic art. The success of treatment is based on the selection of remedy that is similar to the acute totality, followed by the intake of the constitutional (antimiasmatic) drug. A repeated and strong suggestions and advice regarding dietary plan and regimen is also essential along with the appropriate similimum, in order to get the better outcome in lowering the BP.

When a case is presented as acute emergency, we can also manage the case by using 'Mother Tinctures' as an alternative or as a reserve, this is actually termed as palliative approach of homeopathy for management of HTN. The homeopathic concept of minimum dose also works even in prescribing Mother Tinctures. The use of a few drops of mother tincture is proved effective in lowering BP within few minutes in clinical practice. Thus administration of mother tincture is far better than allowing the patient to continue dangerous and heavy doses of modern medicines.

Mother tinctures of *Amyl nitrosum*, *Rauwolfia*, *Allium sativa*, *Cratageus*, *Passiflora*, *Pascidia*, *Baryta muriatica*, *Adonis vernalis*, *Strophanthus*, *Spartium scop*. Are proved useful in managing hypertension till the individual drug of patient find out.

**Amyl nitrosum Q:** Acts as vasodilator. It relief all conditions resulting from spasmodic constriction of blood vessels.

**Rauwolfia Q:** Affective in reducing diastolic blood pressure, are of great use in clinical practice.

**Allium sativa Q:** Causes thinning of blood, also work as diuretic thus lowers the BP.

**Passiflora Q:** Relief nervous tension-act as a relaxant, relaxes the blood vessels.

**Baryta mur Q:** Widened the pulse pressure.

**Spartium scop Q:** Acts as a diuretic, useful in case of renal hypertension and HTN with odema.

**Pascidia Q:** Works as a relaxant, and is a powerful sedative.

## 3.4 Curative approach of Homeopathy in Hypertension

A suitable remedy similar to the acute totality can treat HTN. While managing case of HTN, don't ask the patient to stop antihypertensive drug abruptly, it is advisable to gradually lower the dose.

### 3.4.1 Homeopathic Remedies for HTN Caused by Emotional Stress

Constant stress (mental stress, job stress, stress in family) results in increase production of adrenaline, nor-adrenaline and cortisone which increases the cardiac activity and narrow the blood vessels, resulting in elevation of blood pressure. Hahnemann stressed upon the importance of mental or emotional symptoms in the selection of similimum <sup>[4]</sup>. Following homeopathic remedies are proved useful regarding treatment of essential HTN:

*Aconitum nap:* Is for fear.

*Arsenic alb*: Is for agitation (state of anxiety or nervous excitement).

*Argentum nit*: For anxiety and excessive phobias.

*Nux-vomica*: Is for anger (for short tempered individuals).

*Ignitia*: Is for suppressed grief.

*Staphysagria*: Is for resentment (indignation or irritation).

*Aurum met*: Is for black depression (stress related HTN).

*Gelsemium*: If some bad news aggravates the blood pressure.

*Calcarea carb*: For frightful and overwhelmed individuals etc.

### 3.4.2 Constitutional Remedies for Hypertension:

#### 3.4.2.1 *Belladonna*- Sudden HTN remedy

It is suitable remedy when High blood pressure in fully-blooded individuals, and when the symptoms come suddenly and violently. There is rush of blood towards head with hot and flushed face, dilated pupil and accelerated pulse rate. Frequent and congestive type of headache, throbbing in the temporal arteries. There is generalized heat but the person's hands and feet are cold. Vertigo with headache aggravated from least jar, noise, light etc. Headache ameliorates by covering the head.

Suggested dose: 6<sup>th</sup> to 30<sup>th</sup> potency

#### 3.4.2.2 *Lachesis mutus*-The psychological HTN remedy

The lachesis patient is intensive and talkative, having agitation and inner passion that need an outlet. The patient has many suspicions, revengeful and jealousy is marked. Cannot bear anything tight around the neck and waist and wants loose clothing. Constriction about the chest with suffocative feelings all the time, the condition gets worse after sleep or on waking in the morning. Complaints are due to the suppression of discharges. The female develops symptoms of hypertension at climacteric age. There is marked hemorrhagic tendency.

Suggested potency: 8<sup>th</sup> to 200<sup>th</sup> potency as single dose, not repeat too often.

#### 3.4.2.3 *Natrum mur*-HTN in overly responsible individuals

*Natrum mur* patient is introverted, highly responsible, overly serious and perfectionist. Patient may have silent grief or past history of grief. There is headache, palpitations and feeling of tension (even coldness) in the chest. The person craves for salty things and has great thirst makes the choice of drug easy. Worse in the heat of sun and better from being alone in a quiet place.

Suggested potency: 12<sup>th</sup> to 30<sup>th</sup> or higher.

#### 3.4.2.4 *Argentum nitricum*-Anxiety related HTN remedy

The remedy is useful if the blood pressure elevates with nervousness and anxiety. Stage phobia or anticipation of a stressful event induces diarrhea, frequent urination, headache, dizziness and pounding pulse. These are highly impulsive persons, imaginative and has many fears and phobias. Claustrophobia is marked and patient has great desire of sweet things.

Suggested potency: 3<sup>rd</sup> to 30<sup>th</sup> potency. More effective in aqueous form 2-3 or up to 9 drops.

#### 3.4.2.5 *Aurum metallicum*-Stress related HTN remedy

BP problems related to stress or excessive worries in highly ambitious person, who sets high goals in life but if due to

any reason fail to achieve goal become highly depressed. Self-condemnation or self-criticism develop. Highly impulsive person with a sensation that heart would stop beating for few minutes and then again beat with sudden thump. There is hypertrophy of heart without dilatation. Complaints are worse at night.

Suggested potency: 3<sup>rd</sup> to 30<sup>th</sup> potency.

#### 3.4.2.6 *Glonoinum*-Heart-related HTN remedy

The remedy is indicated where there is flushed face with beating headache and visible throbbing in the blood vessels of neck, heartbeat is irregular and there is feeling of congestion in the chest. Person is worse in the heat of sun, exposure to sun, sun stroke and after taking alcohol. There is a feeling of being lost in a familiar place is one of the strong indications for this remedy.

Suggested potency: 3<sup>rd</sup> to 30<sup>th</sup>

#### 3.4.2.7 *Phosphorus*-A remedy for sensitive persons

Phosphorous person is highly sensitive to external impressions (thunderstorm), very sympathetic, suggestible and desires company. Phosphorous person has many fears and phobias. During hypertension frequent signs include facial flushing, nosebleed, palpitations and a feeling of heaviness/ pain in the chest. It is for left-sided problems. A strong desire for refreshing things and cold drinks, and a marked improvement after sleeping and eating is other signs for Phosphorus.

Suggested potency: low or continuous dosage 3<sup>rd</sup> to 30<sup>th</sup>.

#### 3.4.2.8 Other single Homeopathic medicines and homeopathic combination remedies

Other drugs like *Arsenic alb*, *Aurum mur*, *Adonis ver*, *Apocynum cannabinum*, *Adrenalinum*, *Antimonium tart*, *Apis mellifica*, *Baryta carb*, *Berberis vul*, *Carbo animalis*, *Convallaria*, *Crataegus*, *Coffea*, *Digitalis*, *Kali-phos*, *Kalmia latifolia*, *Lycopodium*, *Lycopus virginicus*, *Plumbum met*, *Strophanthus*, *Sulphur*, *Thuja*, *Veratum viride*, *Viscum album* are some of the commonly used drugs on the basis of symptoms similarity [7,9,10].

Additionally 'Dr. Reckeweg's R85 Cephabol-High Blood Pressure drops' and 'R-185-Hypertension Drops' also help in regulating blood pressure.

### 3.5 Research Data on Role of Homeopathy in HTN

Number of individuals suffering from HTN have increased over years however, the rate of controlled BP (<140/90mmHg) remain poor. The demand of traditional, complementary and alternative medicines (CAM) is increasing especially in chronic diseases like Hypertension. Various researches in this regard show that CAM is effective in the treatment of hypertension but further researches are still needed.

A cross-sectional questionnaire survey was conducted for hypertensive patient, in order to measure the prevalence, effectiveness and pattern of CAM use. The CAM users did not differ statically from non-CAM users by age, health status, marital status, duration of hypertension, education or income. The prevalence of use of CAM is higher in females than males. >70% of responses reflects the effectiveness of alternative medical system, mind-body medicines in the management of hypertension [11].

A retrospective cohort study was made at the National Academy of Homoeopathy, India (NAHI), Nagpur,

Maharashtra. The purpose was to access the efficacy of homeopathic treatment compared to integrated treatment (Homeopathy + conventional pharmacotherapy) in terms of BP control. Cases were diagnosed and treated for HTN under outpatient department in year 2013. Arithmetical results with repeated measures and analysis showed that there lies no marked alteration in the homeopathy and the integrated group in reducing blood pressure at week six of treatment as suggested by ANOVA. It concludes that homeopathy solitary is as effective as homeopathy + conventional pharmacotherapy in the treatment of hypertension [12].

In order to evaluate the determinants, pattern and the association between CAM use and the adherence behavior of hypertensive patients in Ghana a cross-sectional was conducted in Teaching Hospitals in Ghana from May-July, 2012. Data was collected on the socio-demographic characteristics of patients. The results showed a significant relationship between CAM use, the widespread use of CAM among hypertensive in Ghana. The side-effects of use of anti-hypertensive drugs in also observed [13].

A nationally representative cross-sectional survey was conducted to measure the prevalence of CAM use among older adults with diagnosed or un-diagnosed HTN and the extent to which CAM is used specifically for the treatment of HTN. HTN status was evaluated by self-report. Use of CAM was high among older adults with HTN, but in majority of CAM was used for the prevention and treatment of other conditions [14].

A case of 28 year old lady who suffered from uncontrolled HTN, at times her systolic BP had reached upto 180mmHg, was treated successfully with homeopathic remedy “*Lachesis muta*” showed the effectiveness of complementary medicines in the management of HTN. An observational cohort study was conducted by Bignamini in 1987 to determine the efficacy of Crataegus preparation for cardiac insufficiency, the drug proved effective in lowering both systolic and diastolic hypertension [15].

The efficacy of an infrequently used antihypertensive homeopathic remedy “*Viscum album*” was determined by 1-group pretest–posttest model in primary HTN. By only few drops of drug a significant fall in BP ( $P<0.0001$ ) and Serum triglyceride ( $P<0.0001$ ) was observed in test group. The dual action of *Viscum album*, shows that it as an optimizing therapy for primary hypertension [16].

#### 4. Conclusion

Use of homeopathic remedies in the treatment of HTN is proved effective clinically, but more scientific researches need to be done. Managing an individual having HTN with homeopathic drugs is an art, the success of treatment is based upon the selection of a drug similar in picture to the acute totality, followed by the administration of appropriate constitutional remedy. A strict guideline regarding diet and life-style modifications is very essential along with similitum, in order to get the best possible outcomes. When a case is not going to resolve and becoming worse, even after different suitable remedies, it is advisable to refer the case to higher center.

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