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EFFECT OF LESSER KNOWN HOMEOPATHIC MEDICINES ON HYPERTENSION - A PILOT STUDY

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ABSTRACT

Background: Essential hypertension is high blood pressure that doesn't have a known secondary cause. It's also referred to as primary hypertension. Overall, approximately 20% of the world's adults are estimated to have hypertension, when hypertension is defined as raised value of blood pressure >140/90 mm Hg. Methods: The project was conducted at OPD/IPD of Dr. M. P. Khunteta Homoeopathic Medical College, Hospital and Research Centre, Station Road, Jaipur. Thirty cases of Hypertension were taken. Study was undertaken for a period of 12 months. Results: According to the paired t-test done, the medicines which showed improvement in the before and after scores of Systole Blood Pressure are- Acetanilidum, Adonis vernalis, Chinninum sulphuricum, Lycopus virginicus, Spartium scoparium, Strophanthus hispidus, Veratrum viride and Viscum album. According to the paired

t-test done, the medicines which showed improvement in the before and after scores of Diastole Blood Pressure are- *Adonis vernalis, Chinninum sulphuricum, Lycopus virginicus, Spartium scoparium, Strophanthus hispidus*, and *Veratrum viride*.

KEYWORDS: Hypertension, Lesser known Homoeopathic remedies.

INTRODUCTION

Hypertension is a condition in which arterial Blood Pressure (BP) is chronically elevated. BP occurs within a continuous range, so cut-off level is defined according to their effects on patients' risk. The British Hypertension Society has defined ranges of BP which are normal and those that indicate hypertension.^[1]

Table 01: Classification of Hypertension.

Hypertension ^[1]			
Category	Systolic BP (mmHg)	Diastolic BP (mmHg)	
Hypertension			
Grade I (mild)	140-159	90-99	
Grade II (moderate)	160-179	100-109	
Grade III (severe)	≥ 180	≥ 110	
Isolated systolic hypertension			
Grade I	140-159	< 90	
Grade II	≥ 160	< 90	

Physiological Hypertension: Exercise, anxiety, discomfort, unfamiliar surroundings can also causes hypertension.

ESSENTIAL HYPERTENSION

Essential hypertension is high blood pressure that doesn't have a known secondary cause. It's also referred to as primary hypertension. [2] Essential hypertension tends to be familial and is likely to be the consequence of an interaction between environmental and genetic factors. The prevalence of essential hypertension increases with, age and individuals with relatively high blood pressures at younger ages are at increased risk for the subsequent development of hypertension. It is likely that essential hypertension represents a spectrum of disorders with different underlying pathophysiologies. In the majority of patients with established hypertension, peripheral resistance is increased and cardiac output is normal or decreased; however, in younger patients with mild or labile hypertension, cardiac output may be increased and peripheral resistance may be normal. [3] Overall, approximately 20% of the world's adults are estimated to have hypertension, when hypertension is defined as BP in excess of 140/90 mm Hg. [4]

Table 02: Categories of Hypertension.

ESSENTIAL HYPERTENSION[1]			
Category	Systolic BP (mmHg)	Diastolic BP (mmHg)	
Optimal	< 120	< 80	
Normal	< 130	85	
High Normal	130 - 139	85 - 89	

A prospective, double-blind, randomized, placebo-controlled, parallel-arm clinical trial was conducted at the Outpatient Clinic of the Mahesh Bhattacharyya Homoeopathy Medical College and Hospital, West Bengal. Out of 233 hypertensives assessed for eligibility, 150 were enrolled and randomized (verum/homoeopathy 70, control/placebo 80). A total of 18 dropped out and 132 were regular (verum 64, control 68). The outcome measures were assessed after three and six months respectively. In this study *Natrum muriaticum, Calcarea carbonica, Sulphur, Thuja occidentalis, Nitric acid* and *Medorrhinum* were frequently prescribed. Individualized homoeopathy produced a significantly different hypotensive effect than placebo.^[5]

Another study was done, whose purpose of this double-blind study was to evaluate the efficacy of the Homoeopathic simillimum and a Homoeopathic complex (*Aurum metallicum 6CH*, *Lachesis muta 6CH*, *Natrum Muriaticum 6CH*, and *Veratrum album 6CH*) in the treatment of Primary Hypertension in adult females. A minimum of 30 patients were recruited and were selected on the basis of specified inclusion and exclusion criteria, and randomly divided into two equal groups by the research supervisor, with the first group receiving the Homoeopathic simillimum and the second group receiving the Homoeopathic complex. The results of the study led to the conclusion that both the simillimum and complex treatments were effective at reducing blood pressure over time, but there was no evidence that one treatment was more beneficial than the other, since the rates of change over time in systolic and diastolic blood pressure were similar in both treatment groups. [6]

MATERIALS AND METHODS

The project was conducted at OPD/IPD of Dr. M.P. Khunteta Homoeopathic Medical College, Hospital and Research Centre, Station Road, Jaipur. Thirty cases of Essential Hypertension were taken. Study was undertaken for a period of 12 months. Medicine was dispensed from the dispensing unit of Dr. M.P.K. Homoeopathic Medical College or from reputed homoeopathic pharmacy. Cases were selected on basis of Random Sampling Method.

Inclusion Criteria

Following consideration were kept in mind before including a case.

- Undiagnosed Cases of Hypertension.
- ii. Diagnosed Cases of Hypertension. Treated by other system of medicine with no Improvement.
- iii. Diagnosed Cases of Hypertension. Treated by other system of medicine with slight Improvement.
- iv. Diagnosed Cases of Hypertension. Treated Homoeopathically, with or without Improvement.

Exclusion Criteria

At least 6 visits were considered compulsory for proper study otherwise they were dropped out. Patients presenting with gross pathological changes or end organ damage and persistent malignant hypertension were excluded.

Diagnostic Criteria

The main diagnostic tools were blood pressure monitoring with the help of sphygmomanometer, case history and laboratory investigations wherever necessary, were done. The full detail regarding the case were recorded on the Proforma. The following rare Homoeopathic medicines with symptoms were selected for the study-

Acetanilidum^[7]

- Depresses heart, respiration and blood pressure, lowers temperature. Cyanosis and collapse.
- Increased susceptibility to cold.
- Destroys red blood corpuscles; pallor.
- Albuminuria with oedema of the feet and ankles.
- Head, enlarged sensation.
- Palpitations.
- Weak heart, irregular heartbeat with blue mucous membranes.

Adonis vernalis^[8]

- Low vitality, with weak heart and slow, weak pulse. Mitral and aortic regurgitation. Chronic aortitis, Fatty heart pericarditis.
- Rheumatic endocarditis.

- Praecordial pain, palpitation, and dyspnoea.
- Marked venous engorgement.
- Cardiac asthma.
- Fatty heart.
- Myocarditis, irregular cardiac action, constriction and vertigo.
- Pulse rapid, irregular.

Chininum sulphuricum^[8]

- Weak and nervous, little exertion causes palpitations.
- Better from pressure and yawning. Better from bending forwards.
- Trembling. Edematous swelling of the feet.
- Rapid heart action of smokers.
- Palpitation from nervous irritation with oppression around heart.
- Cardiac asthma.

Lycopus virginicus^[8]

- It is indicated in diseases with tumultuous action of the heart and more or less pain.
- The characteristic heart is a feeble heart with distress and weak pulse.
- Cardiac irritability with depressed force. This may be found with organic disease as well as without.
- There is characteristic cough with haemoptysis associated with feeble heart action.
- Haemoptysis due to valvular heart disease.
- Pressure in forehead, worse left side.
- Vertigo, tends to stagger to right.
- Rapid heart action of smokers.
- Palpitation from nervous irritation with oppression around heart.
- Cardiac asthma.

Spartium scoparium^[8]

- Spartium increases the strength of the heart, slows it and reduces the blood pressure.
- It weakens the cardiac contraction.
- Cheyne-stokes respiration.
- Used palliatively in physiological dosage to combat arterial hypertension, arteriosclerosis.
- Tobacco heart. Angina pectoris.

Strophanthus hispidus^[8]

- Strophanthus hispidus increases the contractile power of all striped muscles especially heart, increasing the systole and diminishing the rapidity.
- It has no cumulative action, safe for corpulent, aged persons with rigid arteries.
- Retro-sternal pain.
- Functional disturbances of heart from alcohol, tobacco, tea.
- In mitral regurgitation, where oedema and dropsy have supervened.
- Twitching of the muscles.
- Heart's action weak, rapid, irregular, due to muscular debility and insufficiency.

Strychinum^[8]

- Restless. Over-irritability. Full and bursting headache. Vertigo, with roaring in ears.
- Spasmodic contraction of ocular muscles; twitching and trembling of lids.
- Pale, anxious, livid. Jaws stiffened; lower jaw spasmodically closed.

Uranium nitricum^[8]

- Uranium nit. known to produce high blood pressure, nephritis, diabetes and dropsy.
- Its theurapetic keynote is great emaciation, debility and tendency to ascites and general dropsy.
- Better from deep breathing. Worse at night. Headache, worse walking.

Veratrum viride^[8]

- Veratrum viride induces fall of both systolic and diastolic blood pressure.
- It produces violent congestive conditions, base of brain, medulla, lungs with nausea and vomiting and weakness.
- Paroxysms of auricular fibrillation. Bloated livid face.
- Rheumatism of heart.
- Vertigo with nausea and sudden prostration, better closing eyes and resting head.

Viscum album^[8]

- Lowered blood pressure.
- Hypertensive albuminuria.
- The brain is swaying around the inside the skull.
- Better by counter-pressure, resting quietly, walking in the fresh air. Worse by slightest motion, winter, stormy weather, mental effort and tobacco.

OBSERVATION AND RESULTS

- Maximum number of cases were observed in age group between 50 59 i.e. 20 (28.57 %) and minimum no. of cases were observed between the age group 80 89 i.e. 01 (1.43 %). Number of cases observed in males were more than females i.e. Males 51 (72%) and Females 19 (27%). Essential hypertension 66 (94.28%) and Secondary hypertension 04 (5.71%). The no. of cases which have family history of hypertension were 60 (85.7%) and no. of cases without family history were 10 (14.29%). Addiction was found in 48 (68.57%) cases out of 70 cases of Hypertension, out of which smoking is commonest addiction to be found i.e. 15 (21.43%). Combination of psora sycosis miasm was observed in maximum no. of cases i.e. 55 (78.57%) while the no. of psora-sycosis-syphilis is 08 (11.43) and sycosis is 07 (10%).
- Acetanilidum was given to 5 patients, out of which 3 (60%) patients showed marked improvement, 1 (1.43%) patient showed mild improvement, and 1 (1.43) patient showed no improvement.
- Adonis vernalis was given to 7 patients, out of which 2 (28.57%) patients showed marked improvement, & 3 (42%) patients showed mild improvement and 2 (28.57%) patient showed no improvement.
- Chininum sulphuricum was given to 14 patients, out of which 11 (78%) patients showed marked improvement, 2 (14.29%) patients showed mild improvement and 1 (7.14%) patient showed no improvement.
- *Lycopus virginicus* was given to 6 patients, out of which 4 (66%) patients showed marked improvement, 2 (33.33%) patients showed mild improvement.
- Spartium scoparium was given to 6 patients, out of which 4 (66%) patients showed marked improvement, 1 (16.67%) patients showed mild improvement and 1 (16.67%) patient showed no improvement.
- *Strophanthus hispidus* was given to 7 patients, out of which 3 (42%) patients showed marked improvement, 3 (42%) patients showed mild improvement and 1 (14.29%) patient showed no improvement.
- *Strychninum* was given to 4 patients, out of which 2 (50%) patients showed marked improvement, 1 (25%) patients showed mild improvement and 1 (25%) patient showed no improvement.
- *Uranium nitricum* was given to 4 patients, out of which 2 (50%) patients showed marked improvement, and 2 (50%) patients showed mild improvement.

- *Veratrum viride* was given to 6 patients, out of which 4 (66%) patients showed marked improvement and 2 (33.33%) patients showed mild improvement.
- *Viscum album* was given to 11 patients, out of which 8 (72.73%) patients showed marked improvement and 3 (27.27%) patients showed mild improvement.

STATISTICAL ANALYSIS

The pre and post treatment mean±SD of 10 medicines are as follows:

Viscum album

Systole- Post treatment- Mean 136.82± 6.81, Pre-treatment- Mean 156.36± 28.64 Diastole- Post treatment- Mean 91.82±3.37, Pre-treatment- Mean 101.36±20.51.

Chininum sulphuricum

Systole- Post treatment- Mean 137.14±11.05, Pre treatment- Mean 153.21± 10.30 Diastole- Post treatment- Mean 88.21±5.75, Pre treatment- Mean 97.14±7.26

Strychinum

Systole- Post treatment- Mean 138.33 ± 10.40 , Pre treatment- Mean 153.33 ± 11.55 Diastole- Post treatment- Mean 93.33 ± 7.64 , Pre treatment- Mean 103.33 ± 11.55

Spartium scoparium

Systole- Post treatment- Mean 137.50±2.74, Pre treatment- Mean 153.33±6.05 Diastole- Post treatment- Mean 86.67±4.08, Pre treatment- Mean 96.67±5.16

Lycopus virginicus

Systole- Post treatment- Mean 141.67±9.83, Pre treatment- Mean 155.00±5.48 Diastole- Post treatment- Mean 91.67±4.08, Pre treatment- Mean 100±0.00

Veratrum viride

Systole- Post treatment- Mean 135.71±7.32, Pre treatment- Mean 148.57±10.69 Diastole- Post treatment- Mean 90±4.08, Pre treatment- Mean 96.43±7.48

Uranium nitricum

Systole- Post treatment- Mean 142.50±9.57, Pre treatment- Mean 156.25± 11.09 Diastole- Post treatment- Mean 88.75±6.29, Pre treatment- Mean 97.50±9.57

Acetanilidum

Systole- Post treatment- Mean 130.83±2.04, Pre treatment- Mean 140.00±00

Diastole- Post treatment- Mean 87.50±2.74, Pre treatment- Mean 90.00±0.00

Strophanthus hispidus

Systole- Post treatment- Mean 139.17±2.04, Pre treatment- Mean 152.50±4.18

Diastole- Post treatment- Mean 86.67±4.08, Pre treatment- Mean 100±6.32

Adonis vernalis

Systole- Post treatment- Mean 147.14±3.93, Pre treatment- Mean 152.86±4.88

Diastole- Post treatment- Mean 94.29±3.45, Pre treatment- Mean 100±0.00.

RESULTS

According to the paired t-test done, the medicines which showed improvement in the before and after scores of Systole Blood Pressure are-

- Acetanilidum
- Adonis vernalis
- Chininum sulphuricum
- Lycopus virginicus
- Spartium scoparium
- Strophanthus hispidus
- Veratrum viride
- Viscum album

According to the paired t-test done, the medicines which showed improvement in the before and after scores of Diastole Blood Pressure are-

- Adonis vernalis
- Chininum sulphuricum
- Lycopus virginicus
- Spartium scoparium
- Strophanthus hispidus
- Veratrum viride

CONCLUSION

From the study it can be concluded that homeopathic medicines are effective in lowering the blood pressure in patients suffering from essential hypertention. The outcome of the study may improve the knowledge of the clinicians which will ultimately benefit the patients. This study is a pilot study, so a larger sample size with more stastically sound study is expected.

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