

## Efficacy Of Homoeopathic Medicine in The Management of Hypertension During Pregnancy

Jitendra S. Tomar<sup>1</sup>, Muktesh Arora<sup>2</sup>, Sunil Kumar<sup>3</sup>, Vinay Kumar<sup>4</sup>, Endresh Kumar<sup>5</sup>

<sup>1</sup>Ph.D. (Hom) (Scholar), Tantia University, Sri Ganganagar (Raj.)

<sup>2</sup>M.D.(Hom.), Prof. (Emeritus), Research Supervisor, Tantia University, Sri Ganganagar (Raj.)

<sup>3</sup>M.D.(Hom.), Prof. & HOD, Deptt of Organon of Medicine, Faculty of Homoeopathy, Tantia University, Sri Ganganagar (Raj.)

<sup>4</sup>M.D.(Hom.), Ph.D. (Hom.), Asso. Prof., Deptt of Organon of Medicine, Faculty of Homoeopathy, Tantia University, Sri Ganganagar (Raj.)

<sup>5</sup>M.D. (Hom.), Ph.D. (Hom.), Associate Professor, Dept. of Practice of Medicine, PG department, SS Agarwal Homoeopathic Medical college, Navasri, Gujarat.

**\*Corresponding Author:** Dr. Jitendra S. Tomar

\*Ph.D. (Hom) (Scholar), Tantia University, Sri Ganganagar (Raj.)

### ABSTRACT

**Background:** Gestational hypertension appears during the phase of pregnancy or 20 weeks of gestation and normalizes after pregnancy. The preeclamptic features may appear even before the 20th week as in cases of hydatidiform mole and acute polyhydramnios. The term, “Pregnancy-induced hypertension (PIH)” is defined as the hypertension that develops as a direct result of the gravid state.

Hypertensive Disorders of Pregnancy (HDP) complicate 5% to 10% of pregnancies and are increasing the prevalence of cardio metabolic diseases in younger women.

**Objective:** To efficacy of Homoeopathic medicines in the management of hypertension during pregnancy in the age group of 21-40 yrs. With the homoeopathic medication we can prevent its further complications based on the concept of individualization. Data were created for future studies by using **Gestosis Score** scale which is a risk assessment tool used to predict the development of pre-eclampsia in pregnant women. The score ranges from 1 to 3, with higher scores indicating a higher risk of pre-eclampsia.

**Methods:** It was a randomized, observational trial to evaluate the efficacy of Homoeopathic Medicines prescribed in the treatment of hypertension during pregnancy. The study was done with 100 diagnosed cases of hypertension during pregnancy patient of age group 21-40 yrs. Result: The study showed that homoeopathic medicine are significant role in cases of hypertension during pregnancy.

**Keywords:** Homoeopathic medicines, Hypertension, Pregnancy, Gestosis score scale, Homoeopathic medicines

### INTRODUCTION

For most women, pregnancy is a time of great joy, excitement and anticipation. Unfortunately, for many it can also be a time of serious disturbance in blood pressure, even for women who have never had problems of high blood pressure. Hypertension or high blood pressure is the “Silent killer” of current stressful life. High BP is not a disease, but a symptom or sign of internal malady or pathological course of action during pregnancy.

Gestational hypertension (GHT) is defined as a systolic BP of at least 140 mm Hg and/ or a diastolic blood pressure of at least 90 mm Hg on at least two occasions at least 6 hr apart after the 20th week of gestation in women known to be normotensive before pregnancy. One of the reasons for high blood pressure is fatigue and sleep problems during pregnancy, mental and emotional support and changing hormone levels especially during her first and third trimesters. Hormonal changes may also have an inhibitory effect on muscles, which may result in increased risk of developing high blood pressure and may be partly responsible for the pregnancy related discomforts. Gestational HTN may go to proteinuric phase and may evolve to preeclampsia which becomes retrospective diagnosis.

### METHODS/DESIGN

#### A. Study Design

- The study was randomized and observational study with 100 cases of 6-month intervention and follow up period.
- Minimum six visits was registered for the patient to be in the part of study. Analysis is done through **Gestosis score scale** from baseline to two, four and six months of interval.

#### B. Inclusion Criteria:

1. Pregnant Female of age 21-40 yrs and irrespective of socioeconomic status was selected for the study.
2. Clinically diagnosed cases of Hypertension during pregnancy were included in the study.

3. Patients who were taking allopathic medicine and wish to be the part of this study was included after washout period of allopathic medicine with willing to give voluntary written informed consent was enrolled in the study.

#### C. Exclusion Criteria:

1. Non pregnant Females.
2. Females above the age of reproductive criteria.
3. Cases associated with systemic disorders, having Gross pathological illness and complications.

#### D. Brief of procedures:

- i. Patients were screened and enrolled on the basis of inclusive and exclusive criteria. After proper case taking they were randomly allocated for the medicines selected for the study by using simple randomization technique.
- ii. Selection of 100 cases randomly.
- iii. Classified the clinical and individual expressions with the help of symptom classification form and observation were confirmed by agreement of two physicians.
- iv. Analysis of observational rubrics and symptoms were done for clinical diagnosis, totality formation and remedy differentiation.
- v. Medicine was given in Q, 6C, 30C, 200C or 1M potency as per the prescribing totality. Mother tincture was prescribed in persistent hypertension during pregnancy. The medicine was repeated depending on the potency and complaints of the patient in accordance with the principles of homoeopathy. All the participants were asked to follow healthy diet and to take up regular exercise (at least 30 minutes of exercise at least 5 days a week).
- vi. Assessment of **Gestosis score scale** was done from baseline to each subsequent visit.
- vii. Patient was advised to visit after 14 days or according to change in their complaint.

#### E. Outcome assessment

- The expected outcome was based on the improvement in **Gestosis Score scale** of hypertension during pregnancy.

Grade	Type of risk
0	No risk
1	Low risk
2	Moderate risk
3	High risk
Pregnant women with a Gestosis score of 3 or higher are considered to be at risk for pre-eclampsia and are managed accordingly	

#### STATISTICAL ANALYSIS

Data was obtained during the study have been verified and analyzed using Statistical Package for Social Sciences (SPSS) version 20. Chi square test shall be applied to assess the development of pre-eclampsia in pregnant women. Pre and post analysis (paired *t* test) was applied to assess the development of pre-eclampsia in pregnant women Repeated measure analysis of variance (ANOVA) and pre and post analysis (paired *t* test) was applied for checking the difference in the total score and individual domain score of Gestosis Score Scale.

#### STATISTICAL RESULT

A paired *t*-test was conducted for “**Homoeopathic management in Hypertension during Pregnancy**” via comparing before & after scores collected from the studied sample. There was a significant difference in the scores, of Before ( $M = 1.54$ ,  $SD = 0.50$ ) & After ( $M = 0.51$ ,  $SD = 0.61$ ) conditions:  $t(99) =$ ,  $p = .000$ .

According to statistical analysis,  $t_{cal}$  value i.e. 13.09 is  $>$   $t_{tab}$  value i.e. 2.000, which suggests that the null hypothesis ( $H_0$ ) is rejected at 5% level of significance. Thus alternative hypothesis ( $H_1$ ) is accepted, i.e. after receiving homoeopathic medicines patients of Hypertension during Pregnancy show statistically significant importance.

#### CONCLUSION

The study concluded that hypertension during pregnancy significant improvement with medicines *Bell*, *Lach*, *Nat. Mur* & *Glon*. It is seen that hypertension during pregnancy is likely to be seen in females of age group 26-30 years and living in urban area; mostly cases observed are having predisposing factor of Stress and complaint of headache.

#### REFERENCES

1. Suzanne Oparil, Maria Czarina Acelajado, George L. Bakris, Dan R. Berlowitz, Renata Cífková- Hypertension, Published online 2018 Mar 22. doi: 10.1038/nrdp.2018.14
2. Report of the National High Blood Pressure Education Program Working Group on high blood pressure in pregnancy. *Am J Obstet Gynecol* 2000; 183: S1–S22.



3. Kretchy IA, Owusu-Daaku F, Danquah S. Patterns and determinants of the use of complementary and alternative medicine: A cross-sectional study of hypertensive patients in Ghana. BMC Complementary and Alternative Medicine. 2014; 14:44.
4. Latif Barha - Role of homeopathy in the treatment of hypertension, International Journal of Homoeopathic Sciences 2017; 1(1): 33-37
5. Laura A. Magee, Sharma Sumedha , etc - The incidence of pregnancy hypertension in India, Pakistan, Mozambique, and Nigeria: A prospective population-level analysis
6. Dr. Perween Sultana, Dr. Alam Shamim- Role of homoeopathy in hypertension, International Journal of Homoeopathic Sciences 2020; 4(3): 17-20
7. Singh PK., Kumar D., Mathur A., Hypertension & Its Homoeopathic Management. TUJ. Homo & Medi. Sci. 2021;4(1):32-41
8. Boericke william, Boericks new manual of homoeopathic materia medica, third revised and augmented edition, B.jain publishers
9. Allen H.C., Allen's Keynotes and Characteristics with Comparisons, B.jain publishers
10. Dr. patil J.D., Group study in Homoeopathic materia Medica, B.jain Publishers
11. A dictionary of practical materia medica by Clarke John henry