Pregnancy induced hypertension affects approximately 10% of all pregnant women. It is still a major cause of obstetrical and perinatal mortality.

For this purpose a study was conducted on 50 patients of PIH admitted to the Department of Obstetrics and Gynaecology. The patients were divided into two groups of 25 each as follows:

Group A - Patients with PIH and treated with Methyldopa
Group B - Patients with PIH and treated with Nifedipine

A total of 50 patients of pregnancy induced hypertension were recruited for this study to evaluate the role of methyldopa and nifedipine in pregnancy induced hypertension.

These patients were divided into methyldopa and nifedipine group. In neither group, the patients were subdivided into mild PIH (BP < 160/110 mmHg) and severe PIH (BP > 160/160 mmHg) group according to the level of blood pressure.

Majority of patients 37 (74%) recruited for drug therapy belonged to 21-30 years of age.

There was equal distribution (50%) of primigravida as compared to multigravida.

After three days of onset of antihypertensive therapy both the groups showed a significant and almost similar fall in mean arterial pressure. The fall was greatest in first 24 hours followed by more gradual and sustained fall over the next 7 days till blood pressure approached to near normal levels.
The patients were almost equally distributed regarding gestational age at the time of admission, the majority of patients having 32-35 weeks of gestation.

Amongst majority 36 (76%) cases belonged to mild PIH in comparison to 14 (28%) belonging to severe PIH category.

The response to methyldopa and nifedipine was almost similar in mild PIH but in severe PIH cases the response to methyldopa was more as in methyldopa group 3 (12%) of patients required additional drug for adequate control of PIH which was significantly higher than nifedipine in which 5 (20%) of patients required additional atenolol.

In methyldopa treated group 22 (88%) of patients improvement of proteinuria was observed, 2 (8%) showed no change followed by 1 (4%) in whom deterioration was observed.

In nifedipine group in 21 (84%) of cases improvement in proteinuria was observed followed by 3 (12%) cases in which proteinuria deteriorated.

Mean serum creatinine concentrations were lowered in both methyldopa and nifedipine group but the decrease was not statistically significant.

Mean serum urea acid concentration in both methyldopa and nifedipine group were reduced after treatment and this decrease was statistically significant.

There was no significant difference in mean prolongation of pregnancy with PIH between the two group.

There was a significant fall in BP systolic and diastolic both after treatment with methyldopa and nifedipine.
There was higher incidence of vaginal delivery in patients of mild PIH treated with methyldopa

Majority of the patients of severe PIH treated with nifedipine had

EmLSCS

In majority of cases LSCS was done due to uncontrolled hypertension

There was no significant difference between the two groups regarding the incidence of appropriate for gestational age (AGA) babies & mean birth weight

There was a high incidence of Intra uterine growth restricted fetuses in methyldopa group in comparison to nifedipine group

The mean birth weight of neonates in nifedipine group was more but this increase was not statistically significant

Majority of cases had apgar score between 7 -10 at one minute as such there was no significant difference in one minute Apgar score in both the groups

Perinatal mortality was equal in both nifedipine group & methyldopa group

The mean duration of stay in NICU was more in methyldopa group in comparison to nifedipine group

Thus we conclude that both methyldopa and nifedipine are effective drugs for lowering blood pressure when given orally. Methyldopa was found to have a higher incidence of Intra uterine growth restriction while nifedipine was found to have an increased incidence of perinatal mortality.