

ABSTRACT AND KEY WORDS

ABSTRACT:

AIM:

To study the efficacy of oral labetalol vs. oral nifedipine in the management of Pre-eclampsia in Ante-partum and Intra-partum period.

OBJECTIVES:

Primary Objective:

To study the efficacy of oral labetalol vs. oral nifedipine in management of Pre-eclampsia.

Secondary Objective:

To confirm the results with clinical parameters and maternal and fetal outcome.

METHODS:

All pregnant women irrespective of gestation diagnosed as pre-eclampsia by clinical parameter are subjected to pharmacological therapy. A total of 150 antenatal patients who attended the antenatal clinic and labour ward of the

Department of Obstetrics and Gynaecology, Government Kilpauk Medical College, were selected based on inclusion and exclusion criteria after obtaining their consent.

All selected women were subjected to a detailed history comprising of age, parity, body weight and height, LMP, medical history, drug history, previous obstetric history, previous H/o pre-eclampsia.

They were subjected to clinical examination and BP was recorded. Routine laboratory investigations were done.

Of the 150 antenatal patients, with 75 patients in each group, were subjected to drug therapy.

Group 1: Labetalol

Group 2: Nifedipine

These patients were regularly followed up in the antenatal OP once in 4 weeks till 28 weeks then once in two weeks till their delivery and thorough clinical examination were done focusing their blood pressure and urine albumin. All details were entered.

Definitions used for the diagnosis of pre-eclampsia was according to International Society for the Study of Hypertension in Pregnancy [ISSHP], hypertension is defined as systolic blood pressure of > 140 or diastolic blood pressure of > 90 mmHg.

A rise in the systolic blood pressure of 30mmHg or rise in the diastolic blood pressure of 15mmHg, at least 4 hours apart associated with proteinuria of at least 1+ or 1g/L on dipstick.

RESULTS OF THE STUDY:

- ❖ The patients who had diagnosed to have pre-eclampsia were divided into two groups, Group 1 & 2 randomly.
- ❖ The factors taken for analysis were age group, pre-treatment blood pressure measurement, proteinuria measurement, maternal outcome, fetal outcome, APGAR measurement, NICU admission, birth weight and obstetric score.
- ❖ Group 1 patients were subjected to drug therapy with Tab.Labetalol 100mg twice daily, followed after 6 hours and after 24 hours, and the results were statistically compared.

- ❖ Group 2 patients were subjected to drug therapy with Tab.Nifedipine 10mg thrice daily, followed after 6 hours and after 24 hours, and the results were statistically compared.
- ❖ Efficacy of both drugs in controlling blood pressure compared statistically.
- ❖ Maternal and Fetal outcomes with each drug therapy were statistically compared.

CONCLUSION

After analysing and comparing the results between two groups it was concluded that,

- ❖ The labetalol and nifedipine in oral form appears equally effective in controlling mean blood pressure.
- ❖ Oral nifedipine causes rapid and acute fall in mean blood pressure vs Oral labetalol which causes smooth, stepwise and gradual reduction in blood pressure.
- ❖ Maternal and fetal outcome between two groups in our study was not statistically significant.

- ❖ Previous study in this area compared only parenteral labetalol with oral nifedipine, and proved oral nifedipine proved to be superior.
- ❖ In our study, within the patient with same profile, labetalol appears to be more superior to oral nifedipine, in the form of smooth, gradual and adequate control of blood pressure.

KEY WORDS:

Pre-eclampsia, Gestational Hypertension, Proteinuria, Systolic, Diastolic, and Mean blood pressure, Labetalol, Nifedipine, Maternal and fetal outcome.