ABSTRACT

DRUG UTILIZATION STUDY OF ANTIHYPERTENSIVE AGENT IN SEVERE PREECLAMPSIA PATIENT
(A Study at Obstetrics and Gynecology
Department dr. Soetomo Teaching Study, Surabaya)

Background: Preeclampsia is hypertension associated with proteinuria and edema, occurring primarily in nulliparas after the 20th gestational week and most frequently near term. The goals of management of severe preeclampsia are prevention of convulsions, control of maternal blood pressure to normal, and initiation of delivery (Decherney, 2007). There are four antihypertensive agents which can be used in severe preeclampsia but can occur adverse effect for mother also fetal and cause an interaction that damage for mother. In Indonesia, incident of preeclampsia-eclampsia is 5.8% (7,848 cases) with total mortalities 166 women suffering from preeclampsia-eclampsia and it is the biggest cause of mortality among mothers in Indonesia with CFR value 2.1%.

Objective: To study the profile of antihypertensive therapy in severe preeclampsia patient.

Method: The retrospective descriptive observational study was performed to the patients at obstetrics and gynecology department dr. Soetomo Teaching Hospital Surabaya during January, 1st 2010 to December, 31st 2010 (N = 32).

Result: The most antihypertensive agents used were nifedipine, amlodipine, nicardipine, methyldopa and furosemide. The most antihypertensive agent combination used were nifedipine and furosemid also nifedipine and methyldopa. Drug related problem that could be found in this study was inappropriate antihypertensive agents in patients with blood pressure less than 160/110 mmHg (3,1%) or less than 180/120 mmHg (62,1%).

Conclusion: Antihypertensive agents used in severe preeclampsia patients were nifedipine, methyldopa, furosemid, nicardipine HCl and amlodipine. Provision of nifedipin as anti hypertensive therapy had provided significantly profile of blood pressure decrease (30 mmHg), and had obtained more significantly blood pressure decrease by administering a combination of anti hypertensive therapy such as nifedipine and methyldopa (48 mmHg).

Keywords: drug utilization, severe preeclampsia, antihypertensive agent, nifedipine, nicardipine, amlodipine, methyldopa, furosemide