EUROPEAN GUIDELINES (ESC-ESH, 2013) FOR HYPERTENSION THERAPY IN PREGNANT WOMEN

Leseiko I. V., Misiurova S. V.
National University of Pharmacy, Kharkiv, Ukraine
iraleseiko@i.ua

Introduction. According to the WHO study group hypertensive disorders during pregnancy are one of the priority healthcare issues. After all, when arterial hypertension (HT) in pregnant women is observed there are serious violations of health, in some cases even ends with mother's death and a high level of child perinatal morbidity and mortality. Globally, this disease (pregnancy-induced hypertension) is 3.2-4% of cases and is the most common disease in pregnant women. Different forms of hypertension in pregnant women differ in their consequences: solitary (isolated) often proceeds without complications and outcomes, while preeclampsia is a severe pathology that threatens the embryo's life and mother's health. The main factors contributing to the development of hypertension in young women are burdened heredity, overweight, post-term preeclampsia during previous pregnancies and childbirth. Today the following forms of hypertension in pregnant women are distinguished (according to the Expert consensus document on management of cardiovascular diseases during Pregnancy - Guidelines for the treatment of cardiovascular disease in pregnancy European Society of Cardiology):

- chronic hypertension (increase of pressure observed before the pregnancy with or without proteinuria in patients with the background of a specific disease that was diagnosed before, during pregnancy or after the childbirth);
- preeclampsia - eclampsia (proteinuria >300 mg per 24 hours or in two different urine samples, combined with newly diagnosed hypertension). Edema is not diagnostic criterion of preeclampsia because of its low peculiarity;
- preeclampsia combined with chronic hypertension (an increase blood pressure (BP) which is higher than the typical one for patient before the pregnancy, the degree of proteinuria change and signs of target organs damage);
- gestational hypertension (newly discovered hypertension with BP 140/90 mm hg. art. at two measurements, which appears for the first time after the 20th week pregnancy).

Goal. Explore the new approaches to the hypertension treatment in pregnant women according to the Guidelines of the European Association (ESC-ESH, 2013).

Results. In international and national recommendations different thresholds for initiation of therapy and different target values of blood pressure during pregnancy are given. The proposed in recommendations ESH / ESC 2007 proposals on the feasibility of drug therapy for all pregnant women with persistent increase of blood

pressure to a level >150/95 mmHg. After the publication of previous recommendations any additional information on antihypertensive drugs that could be prescribed to pregnant women with hypertension did not appear so as valid recommendations methyldopa, labetalol and nifedipine - the only calcium antagonist that really was studied during pregnancy are used.

Beta-blockers (which could cause the growth retardation of the fetus in early pregnancy) and diuretics (at the already existing reduction of circulating plasma) should be used with caution. As mentioned above, it must be strictly avoided the use of drugs which affect the renin - angiotensin - aldosterone system (angiotensin-converting enzyme (ACE) inhibitors, angiotensin receptor blockers II (ARBs), renin inhibitors).At urgent cases (preeclampsia) drug of choice is intravenous labetalol driving; also sodium nitroprusside or nitroglycerin intravenous infusion could be used.

There are great differences in opinions on the effectiveness of low doses of aspirin for prevention of preeclampsia. Despite the fact that a large meta-analysis reported a small protective effect of aspirin at preeclampsia, as a result of the other two most recent tests the opposite conclusions were done. Summarizing the data on more than 11,000 women included in the PCI low doses of aspirin in pregnancy, concluded that in women who started therapy before 16 weeks of pregnancy it was noted significant reduction of relative risk of preeclampsia (relative risk 0.47) and severe preeclampsia (relative risk: 0.09) compared with control. With these differences in the data, it is reasonable to recommend the following: women with a high risk of preeclampsia (hypertension during a previous pregnancy with chronic kidney disease (CKD), autoimmune diseases such systemic lupus erythematosus or antiphospholipid syndrome, I or II type diabetes, chronic hypertension) or with more than one factor of moderate risk of preeclampsia (first pregnancy, age more than 40 years, the interval between pregnancies over 10 years, body mass indicator (BMI)> 35 kg / m^2 on the first visit, a family history of preeclampsia and multiple pregnancy) could be recommended acceptance of aspirin in dose of 75 mg per day, starting at 12 weeks of pregnancy and till childbirth, provided low risk of gastrointestinal bleeding.

Conclusions. Therefore, pregnant women with hypertension are at risk zone. Careful monitoring of mother and fetus allows to prevent a number of complications. Drug therapy in women at low risk does not affect perinatal outcomes, but hypotensive drugs are used to prevent vascular complications in mother. The therapeutic strategy should be aimed at improving the state of the mother, and the only way to increase child survival rates - timely childbirth.