

**THE INCIDENCE OF ARTERIAL HYPERTENSION THAT
COMPLICATES PREGNANCY, PARTURITION AND
POSTPARTUM PERIOD IS INCREASING
- DEPARTMENT EXPERIENCE -**

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ABSTRACT:

ARTERIAL HYPERTENSION THAT COMPLICATES PREGNANCY, PARTURITION AND POSTPARTUM PERIOD IS A MAJOR PUBLIC HEALTH ISSUE, DUE TO ITS INCREASED, BOTH FETAL AND MATERNAL, MORBIDITY AND MORTALITY. THIS STUDY WAS UNDERTAKEN IN ORDER TO DETERMINE THE INCIDENCE OF DIFFERENT CATEGORIES OF ARTERIAL HYPERTENSION WHICH COMPLICATE PREGNANCY, PARTURITION AND POSTPARTUM PERIOD, IN OUR DEPARTMENT. WE RETROSPECTIVELY ANALYZED THE CHARTS OF PATIENTS WHO DELIVERED IN THE DEPARTMENT OF OBSTETRICS AND GYNECOLOGY OF THE UNIVERSITY EMERGENCY HOSPITAL BUCHAREST BETWEEN 01.01.2007 - 31.12.2013 DIAGNOSED WITH A FORM OF ARTERIAL HYPERTENSION THAT COMPLICATED PREGNANCY, PARTURITION AND POSTPARTUM PERIOD. WE HAVE OBSERVED AN INCREASED INCIDENCE OF ALL FORMS OF ARTERIAL HYPERTENSION THAT COMPLICATES PREGNANCY, PARTURITION AND POSTPARTUM PERIOD, ESPECIALLY THE MODERATE AND SEVERE TYPES OF PREECLAMPSIA.

KEY WORDS: GESTATIONAL HYPERTENSION, PREECLAMPSIA, ECLAMPSIA, INCIDENCE

INTRODUCTION

Arterial hypertension complicates approximately 4 % of all pregnancies^{1,6,8}. Hypertensive disorders are among the most common medical conditions of pregnancy^{2,7-10}. Arterial hypertension that complicates pregnancy, parturition and postpartum period, is a

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major public health issue, due to its increased, both fetal and maternal, morbidity and mortality^{1,3,5}.

The pathogenesis of pregnancy induced hypertension is not completely known, however it has been demonstrated that the placenta plays a key role⁹.

According to The National High Blood Pressure Education Program Working Group on High Blood Pressure in Pregnancy, hypertensive conditions during pregnancy are classified into 4 categories⁴:

- Chronic hypertension - blood pressure > 140/90 mmHg before pregnancy or before 20 weeks of gestation.
- Preeclampsia/eclampsia
 - Mild preeclampsia – blood pressure > 140/90 mmHg during two determinations, in a woman who was normotensive before 20 weeks of gestation.
 - Severe preeclampsia – blood pressure > 160/110mmHg or elevated blood pressure (> 140/90 mmHg) that associates: proteinuria/ pulmonary edema/oliguria/epigastric pain/thrombocytopenia
 - Eclampsia – seizures in a patient with preeclampsia
- Preeclampsia superimposed on chronic hypertension
- Gestational hypertension

Arterial hypertension that complicates pregnancy, parturition and postpartum period has severe consequences, both maternal and fetal, and for that matter, a precocious diagnosis and an accurate evaluation of the severity of the disease are highly important in order to appoint an adequate treatment, thus decreasing the risk of complications¹¹.

This study was undertaken in order to determine the incidence of different forms of arterial hypertension which complicate pregnancy, parturition and postpartum period, in our department.

MATERIALS AND METHODS

We retrospectively analyzed the charts of patients who delivered in the Department of Obstetrics and Gynecology of the University Emergency Hospital Bucharest between 01.01.2007 - 31.12.2013 diagnosed with a form of arterial hypertension that complicated pregnancy, parturition and postpartum period. The information was obtained from the inpatient charts and computerized database of the Statistical Unit at Bucharest Emergency University Hospital. All statistical analyses were conducted using the SPSS version 19.

RESULTS

Between 01.01.2007 and 31.12.2013, 31399 patients delivered in the Department of Obstetrics and Gynecology of the University Emergency Hospital Bucharest. 7,93% cases (n=2491) a form of arterial hypertension complicated pregnancy, parturition and postpartum period.

Figure 2. presents the distribution of pregnancies complicated by a form of arterial hypertension between 01.01.2007 and 31.12.2013.

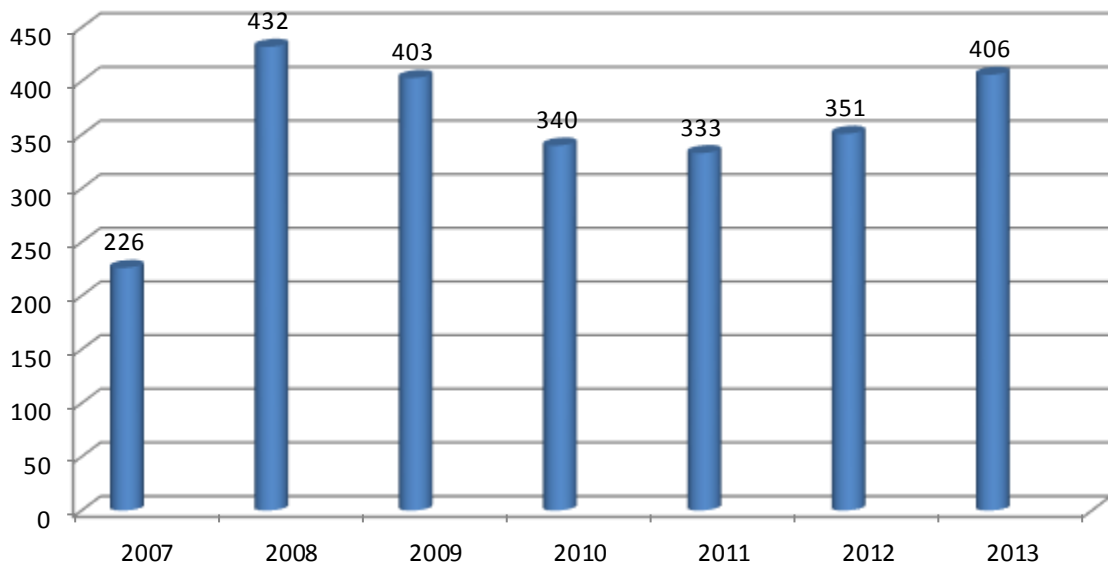


Figure 1. – The distribution of pregnancies complicated by a form of arterial hypertension between 2007-2013

Following the diagnostic codes, 5 categories were assorted: chronic hypertension, gestational hypertension, mild preeclampsia, severe preeclampsia and eclampsia. We analyzed the distribution of these categories in each year (see Figure 2., Figure 3., Figure 4., Figure 5., Figure 6., Figure 7., Figure 8.).

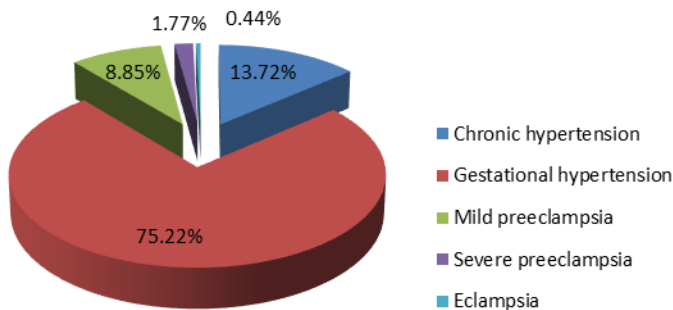


Figure 2. – The distribution of categories of hypertension that complicated pregnancy, parturition and postpartum period in 2007

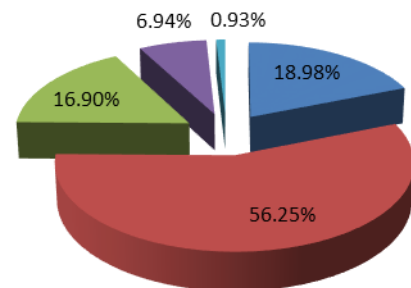


Figure 3. – The distribution of categories of hypertension that complicated pregnancy, parturition and postpartum period in 2008

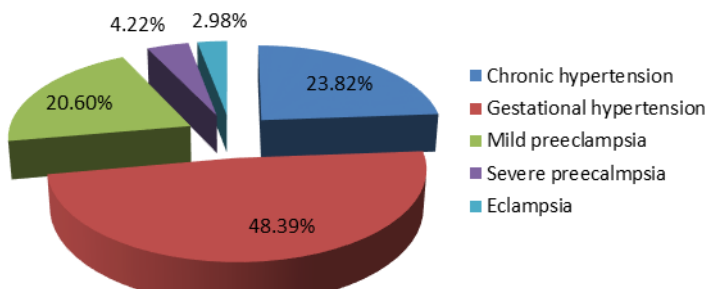


Figure 4. – The distribution of categories of hypertension that complicated pregnancy, parturition and postpartum period in 2009

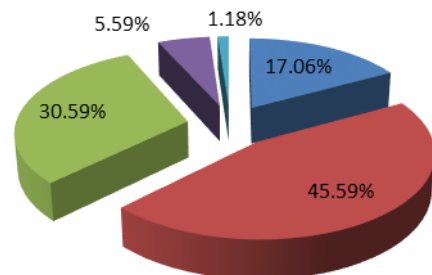


Figure 5. – The distribution of categories of hypertension that complicated pregnancy, parturition and postpartum period in 2010

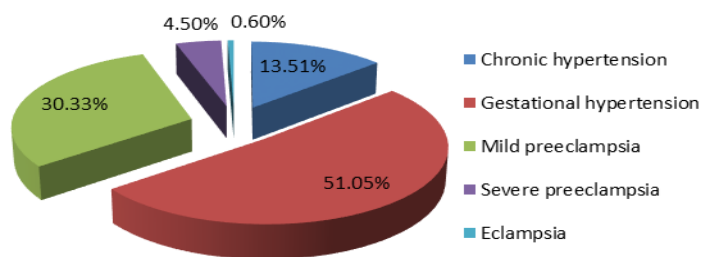


Figure 6. – The distribution of categories of hypertension that complicated pregnancy, parturition and postpartum period in 2011

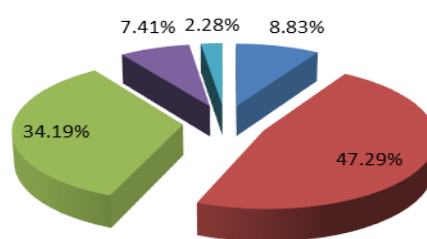


Figure 7. – The distribution of categories of hypertension that complicated pregnancy, parturition and postpartum period in 2012

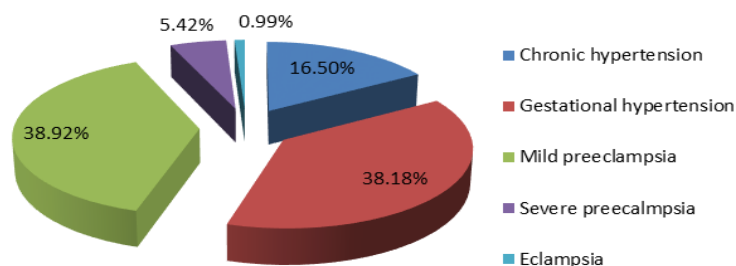


Figure 9. – The distribution of categories of hypertension that complicated pregnancy, parturition and postpartum period in 2013

We evaluated and compared the incidence of the 5 assorted categories of arterial hypertension between the 7 years studied (see Figure 10).

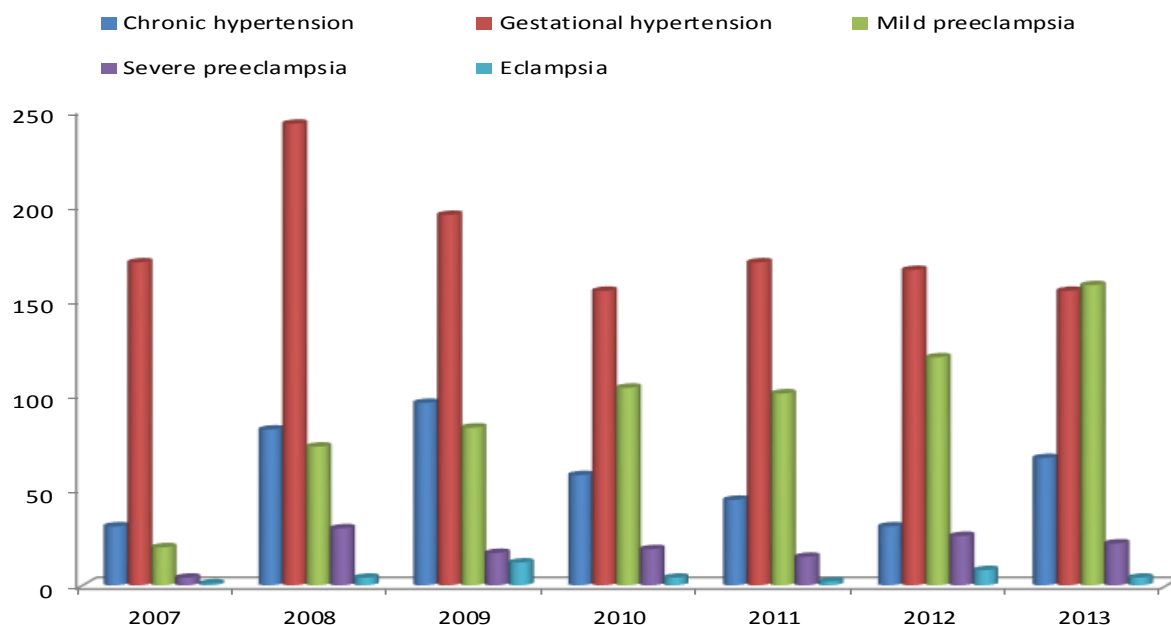


Figure 10. – The distribution of categories of hypertension that complicated pregnancy, parturition and postpartum period between 2007 and 2013

During the 7 years studied the most frequent category of hypertension that complicated pregnancy, parturition and postpartum period was gestational hypertension – 1254 cases. The rarest type was eclampsia – 35 cases (see Figure 10).

CONCLUSION

Even if from 2009, the number of deliveries in our department is decreasing, proportionally, we have observed an increased incidence of all forms of arterial hypertension that complicates pregnancy, parturition and postpartum period, especially the moderate and severe types of preeclampsia.

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