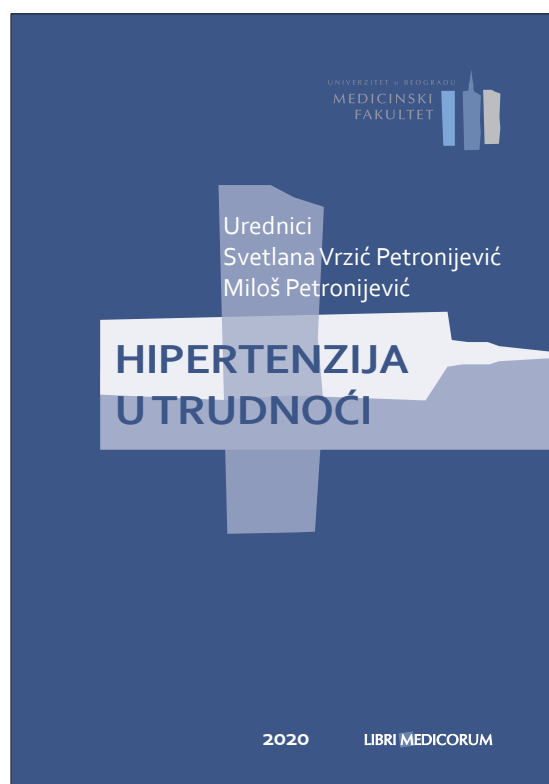


## HYPERTENSION IN PREGNANCY

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Termini: hipertenzija u trudnoći, EPH gestoza, gravidarna toksikoza, trudnoćom uzrokovana hipertenzija (engl. *pregnancy induced hypertension* – PIH), pa sve do savremene klasifikacije date u ovoj knjizi, opisuju problem koji od pamtiveka zadaje glavobolje ne samo akušerima, već i anesteziolozima i neonatolozima - celom timu koji se danas multidisciplinarno bavi zdravljem trudnice, fetusa i novorođenčeta. Jedan je od vodećih uzroka maternalnog mortaliteta, ovo stanje poznato još od drevnog Egipta, stare Grčke i Rima, danas je etiološki prilično dobro razjašnjeno, ali se još uvek traga za pouzdanim testovima koji bi predikciju, a samim tim i lečenje, podigli na viši nivo.

Cilj ove knjige bio je da se na jednom mestu, sveobuhvatno, a opet nepretenciozno prikaže ono što je o hipertenziji u trudnoći poznato danas, daju smerne svetskih vodiča za dijagnostiku, lečenje i dalje

The terms: hypertension in pregnancy, EPH-gestosis, pregnancy toxicosis, pregnancy induced hypertension – PIH, and all the terminology within the contemporary classification presented in this book, describe an age-old problem which has been plaguing not only obstetricians, but also anesthesiologists and neonatologists – an entire team which is in this day and age involved in a multidisciplinary approach to the health of the pregnant woman, the fetus, and the newborn. A leading cause of maternal mortality, this state, known since ancient Egypt, Greece and Rome, is today etiologically quite well understood, but reliable tests are yet to be found that would bring prediction, and thereby treatment, to a higher level.

The goal of this book was to comprehensively, yet unpretentiously, present in one place all that is known about hypertension in pregnancy today; to outline the

praćenje trudnica, porodilja i njihove novorođenčadi u svetlu potencijalnih komplikacija bolesti. Razumevanje etiologije poremećaja ključno je i za adekvatnu terapiju, koja, naročito u teškim stanjima, nažalost može biti samo simptomatska. Savremeni terapijski pristup omogućava da se čak i u teškim slučajevima porođaj, koji je nekada jedni pravi lek, odloži na neko vreme u cilju postizanja zrelosti ploda.

Većita dilema: kada i na koji način poroditi trudnicu sa hipertenzijom, prikazana je kao borba između ekspektativnog i agresivnog delovanja, sa dobrim i lošim stranama i jednog i drugog pristupa. Da se nekada radi i o vitalno ugroženoj pacijentkinji najbolje se vidi iz poglavlja o anesteziološkom pristupu ovom poremećaju.

Na kraju, važno je da se ne zaboravi da se porođajem lečenje ne završava, jer su ove porodilje podložne brojnim kardiovaskularnim problemima tokom daljeg života, na šta im je neophodno skrenuti pažnju pre otpusta iz porodilišta.

## PRIKAZ DELA PO POGLAVLJIMA

Knjiga „Hipertenzija u trudnoći“ je udžbenička literatura koja široko obuhvata obim rada ginekologa-akusera, perinatologa, ali i lekara drugih specijalnosti kao što su internisti, anesteziolozi, pedijatri-neonatolozi, i svih ostalih specijalističkih grana koje se u nekom segmentu bave dijagnostikom, lečenjem i praćenjem trudnica sa hipertenzivnim sindromom. Knjiga je sveobuhvatna, kako po pitanju naučnih podataka koji pripadaju bazičnim medicinskim disciplinama, tako i po pitanju kliničkog rada. Poglavlja u knjizi su organizovana logičnim redosledom, počevši od prvog poglavlja, u kome je navedena najsavremenija klasifikacija hipertenzije u trudnoći, preko patofiziologije, modernog terapijskog pristupa, do tretmana novorođenčeta iz trudnoće opterećene hipertenzijom majke. Ne manje važno, obrađeno je i pitanje daljeg praćenja porodilja čija je trudnoća bila opterećena hipertenzijom, zbog mogućih kardiovaskularnih komplikacija tokom daljeg života.

Poglavlje 1. SAVREMENI PRISTUP U KLASIFIKACIJI I DIJAGNOSTICI HIPERTENZIJE U TRUDNOĆI. U poglavlju je data najsavremenija klasifikacija hipertenzije u trudnoći, što je potkrepljeno aktuelnim referencama iz najrelevantnijih vodiča međunarodnih udruženja.

Poglavlje 2. PATOFIZIOLOGIJA PREEKLAMPSIJE. U poglavlju su izložena aktuelna viđenja patofiziologije preeklampsije kroz uvid u brojne radove, kako na animalnim, tako i na humanim in i ex vivo modelima, kao i kroz istraživanja na molekularnom nivou.

guidelines of international guidebooks on the diagnostics, treatment and further monitoring of pregnant women, new mothers and their newborns in view of potential complications of the illness. The understanding of the etiology of the disorder is crucial for adequate therapy, which, especially in serious cases, unfortunately may only be symptomatic. The contemporary approach to therapy makes it possible that, even in difficult cases, the delivery, which used to be the only resolution to the problem, may be postponed for a time, for the purpose of achieving the maturity of the fetus.

The age-old dilemma: when and how to deliver a baby to a pregnant woman suffering from hypertension, has been presented as a struggle between expectative and aggressive action, with advantages and disadvantages to both approaches. That sometimes the doctors are dealing with a patient whose life is in danger can best be understood from the chapter on the anesthetic management of this disorder.

Finally, it is important not to forget that treatment does not end with the delivery, since these patients are susceptible to numerous cardiovascular problems during the rest of their lives, which they must be made aware of before they are discharged from hospital.

## OVERVIEW OF THE BOOK BY CHAPTERS

*Hypertension in Pregnancy* is a textbook which broadly covers the scope of work of gynecologists-obstetricians, perinatologists, but also of doctors of other specialties, such as internal medicine doctors, anesthesiologists, pediatricians-neonatologists, and doctors of all other specialties which, in some segment, deal with the diagnostics, treatment and monitoring of pregnant women with hypertensive syndrome. The book is comprehensive, both in the domain of the scientific data pertaining to fundamental medical disciplines, and in the domain of data pertaining to clinical practice. The chapters in the book are organized in logical order, starting with the first chapter, which presents the latest classification of hypertension in pregnancy, and then moving on to the pathophysiology, contemporary approach to therapy, and the treatment of the newborn baby coming from a pregnancy complicated by the mother's hypertension. The equally important issue of further follow-up of new mothers whose pregnancy was complicated by hypertension is also presented here, which is done because of possible cardiovascular complications, later in life.

Chapter 1. CONTEMPORARY APPROACH TO THE CLASSIFICATION AND DIAGNOSTICS OF HYPERTENSION IN PREGNANCY. The chapter presents the latest classification of hypertension in pregnancy, which is substantiated by up-to-date references from the most relevant guidebooks of international associations.

Poglavlje 3. FAKTORI RIZIKA I PREDIKTORI PREEKLAMP-SIJE. U poglavlju su sistematično prikazani faktori rizika i prediktivni modeli pojave preeklampsije.

Poglavlje 4. HIPERTENZIJA U TRUDNOĆI I UROĐENE SR-ČANE MANE. U poglavlju je prikazana veza između hipertenzivnog poremećaja u trudnoći i nastanka urođenih srčanih mana fetusa.

Poglavlje 5. HELLP sindrom. U poglavlju je opisana etiopatogeneza, klasifikacija, dijagnostika i lečenje jedne od najtežih formi hiperetenzivnog sindroma u trudnoći.

Poglavlje 6. PLANIRANJE VREMENA I NAČINA POROĐAJA KOD TRUDNICA SA HIPERTENZIVNIM SINDROMOM. U poglavlju su opisana dva pristupa kod planiranja završavanja trudnoće kod žena sa hipertenzivnim sindromom u trudnoći. Prikazani su rizici jatrogenog prematuriteta u odnosu na potencijalne komplikacije daljeg nastavljanja trudnoće kod ugroženosti majke i ploda.

Poglavlje 7. TERAPIJA HIPERTENZIJE U TRUDNOĆI. U poglavlju je navedena najaktuelnija terapija hipertenzivnog poremećaja u trudnoći, a prema preporukama najnovijih svetskih vodiča.

Poglavlje 8. HIPERTENZIVNI SINDROM U TRUDNOĆI - NAČIN ZAVRŠAVANJA POROĐAJA I INTRAPARTALNI NADZOR. U poglavlju je opisan intrapartalni nadzor trudnica sa hipertenzijom.

Poglavlje 9. INTENZIVNO LEČENJE PACIJENTKINJA SA KOMPLIKACIJAMA HIPERTENZIVNOG SINDROMA U TRUDNOĆI. U poglavlju je dat iscrpan prikaz uloge anesteziologa u lečenju trudnica i porodilja sa hipertenzivnim sindromom.

Poglavlje 10. POSTPARTALNI NADZOR I TRETMAN PORODILJA ČIJA JE TRUDNOĆA BILA KOMPLIKOVANA HIPERTENZIVNIM SINDROMOM.

Poglavlje 11. FETALNO PROGRAMIRANJE KROZ TRUDNOĆU OPTEREĆENU HIPERTENZIJOM. U poglavlju je obrađena danas veoma aktuelna tema fetalnog programiranja koje, kod majki sa hipertenzivnim sindromom, ima posebne karakteristike.

Poglavlje 12. NOVOROĐENČE IZ TRUDNOĆE KOMPLIKOVANE HIPERTENZIJOM MAJKE. U poglavlju je detaljno opisan postupak kod novorođenčeta majke čija je trudnoća bila komplikovana hipertenzivnim sindromom.

Knjiga „Hipertenzija u trudnoći“ je vredan doprinos našoj medicinskoj publicistici. Predstavlja sveobuhvatan napor urednika i autora da se ova značajna i aktuelna materija približi čitaocima – lekarima na poslediplomskim studijama, ali i lekarima na specijalizaciji, specijalistima i lekarima na užoj specijalizaciji.

Chapter 2. PATHOPHYSIOLOGY OF PREECLAMPSIA. The chapter presents current views on the pathophysiology of preeclampsia through insights into numerous studies performed both on animal and on human in vivo and ex vivo models, as well as through research at the molecular level.

Chapter 3. RISK FACTORS AND PREECLAMPSIA PREDICTORS. The chapter systematically describes the risk factors and the predictive models of preeclampsia occurrence.

Chapter 4. HYPERTENSION IN PREGNANCY AND CONGENITAL HEART DEFECTS. This chapter shows the link between hypertensive disorder in pregnancy and the development of congenital heart defects in fetuses.

Chapter 5. HELLP SYNDROME. The chapter describes the etiopathogenesis, classification, diagnostics and treatment of one of the most serious forms of hypertensive syndrome in pregnancy.

Chapter 6. PLANNING THE TIME AND METHOD OF DELIVERY IN WOMEN WITH HYPERTENSIVE SYNDROME. The chapter depicts two approaches to the planning of the end of pregnancy in women with hypertensive syndrome. The risks of iatrogenic prematurity as compared to potential complications of continuing the pregnancy when the mother and the fetus are in danger.

Chapter 7. THERAPY OF HYPERTENSION IN PREGNANCY. The chapter presents the latest therapy options for hypertensive disorder in pregnancy, in keeping with the recommendations in current international guidebooks.

Chapter 8. HYPERTENSIVE SYNDROME IN PREGNANCY – METHOD OF PREGNANCY COMPLETION AND INTRAPARTUM MONITORING. The chapter describes intrapartum monitoring of pregnant women with hypertension.

Chapter 9. INTENSIVE TREATMENT OF FEMALE PATIENTS WITH COMPLICATIONS OF HYPERTENSIVE SYNDROME IN PREGNANCY. The chapter gives a detailed description of the role of the anesthesiologist in the treatment of pregnant women and new mothers with hypertensive syndrome.

Chapter 10. POSTPARTUM MONITORING AND TREATMENT OF NEW MOTHERS WHOSE PREGNANCY WAS COMPLICATED BY HYPERTENSIVE SYNDROME.

Chapter 11. FETAL PROGRAMMING THROUGH PREGNANCY COMPLICATED BY HYPERTENSION. The chapter deals with the currently very topical issue of fetal programming which, in mothers with hypertensive syndrome, has unique characteristics.

Chapter 12. THE NEWBORN BABY COMING FROM A PREGNANCY COMPLICATED BY THE MOTHER'S

Knjiga odgovara zahtevima nastave na postdiplomskoj i dvosemestralnoj nastavi iz ginekologije i akušerstva, ali i neonatologije, anesteziologije, kardiologije. Po tematici, referencama i prikazu je savremena, bazirana na najnovijim preporukama i vodičima dobre kliničke prakse i u skladu sa propozicijama pisanja udžbeničke literature.

Knjiga, kroz 12 poglavlja čitaoca sistematično vodi od aktuelnih bazičnih naučnih medicinskih saznanja, savremenog terapijskog pristupa, do veoma važnog trenutka u trudnoći opterećenoj hipertenzijom – načina i vremena porođaja. Pisana jasnim stilom i razumljivim jezikom, knjiga predstavlja zaokruženu celinu. Knjiga „Hipertenzija u trudnoći“ je zvanični udžbenik za postdiplomsku nastavu Medicinskog fakulteta Univerziteta u Beogradu.

U Beogradu 03.11.2020.

Recenzent  
Prof. dr Darko Plećaš

**HYPERTENSION** The chapter gives a detailed description of the procedure followed in newborns of mothers whose pregnancy was complicated by hypertensive syndrome.

The book *Hypertension in Pregnancy* is a valuable contribution to medical literature. It is a comprehensive effort made by the editors and authors to present this important and current issue to the readers – to doctors on postgraduate studies, but also to doctors in specialist training, specialists, as well as doctors undergoing subspecialist training. The book meets the requirements of postgraduate studies and also the requirements of two-semester university courses of gynecology and obstetrics, neonatology, anesthesiology and cardiology. It is up to date as to the topic, references and presentation and is based on the latest recommendations and guidebooks of good clinical practice and meets the requirements of textbook writing.

Through its 12 chapters, the book systematically leads the reader from current fundamental scientific medical knowledge and contemporary therapeutic approaches to the very important issue in pregnancies complicated by hypertension – the method and time of delivery. Written in a clear style and understandable language, the book covers the topic completely and comprehensively. *Hypertension in Pregnancy* is the official textbook for postgraduate studies at the Faculty of Medicine of the University of Belgrade.

In Belgrade, November 11, 2020

Reviewer  
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