

POSITION

by Assoc.Prof. Maria Angelova Ph.D.,

Head of the Department of Obstetrics and Gynecology at the Faculty of Medicine at Thrace University

about a dissertation on "Diagnostic approaches and clinical management in hydronephrosis during pregnancy" for the award of a scientific and educational degree "Doctor".

Scientific specialty 03.01.45. "Obstetrics and Gynecology" .

Author: Dr. Zlatka Georgieva Dimitrova-Sandulova

Scientific supervisors: Assoc.Prof. Kremen Tsvetkov, Ph.D.

Assoc.Prof. Tosho Ganev, Ph.D.

The submitted documents for the procedure are in full compliance with the requirements and are perfectly organized.

Data on the PhD student - Biographical data and career development:

Dr. Zlatka Georgieva Dimitrova-Sandulova was born on January 20, 1982 in Stara Zagora. She completed her secondary education at Secondary School "Geo Milev" in Stara Zagora in 2000. In 2007, she graduated from the Medical University of Varna, majoring in "medicine". She acquired a specialty in Obstetrics and Gynecology in 2017.

From 2016 to the present, he works at SBAGAL "Prof. Dr. D. Stamatov" Varna, Department of Pathological Pregnancy. In 2017, after a competition, she was selected as an assistant at the Department of Obstetrics and Gynecology. Additional qualifications and courses are in the field of Abdominal Echography, Colposcopy and destructive treatment of cervical precancers. Ultrasound diagnostics in obstetrics and gynecology practice, Training courses in the field of Fetal morphology, etc. Fluent in English and French, written and spoken. Her main professional interests are in the field of maternal-fetal medicine.

Actuality of the dissertation

The dissertation work developed by Dr. Zlatka Dimitrova contains 135 pages, including 24 figures and 41 tables. The bibliography covers 286 literary sources, of which 17 are in Cyrillic and 269 are in Latin. The publications related to the dissertation work are 4. The dissertation work of Dr. Zlatka Dimitrova begins with an overview of the topic. The author traces the historical development of the problem. In the next section, modern diagnostic and treatment methods for complicated hydronephrosis in pregnant women are examined in details and in depth. The actuality of the topic is substantiated in a categorical manner in the introduction of the dissertation work.

The purpose of the dissertation is clearly and precisely formulated. For the fulfillment of the scientific goal, the PhD student has set himself 7 tasks. For the performance of the tasks, the author examined and studied 186 pregnant women with varying degrees and severity of hydronephrosis. Pregnant women are divided into four age groups, ranging from under 20 to over 41. They were randomized into two cohorts, for the first and second half of pregnancy.

The groups were compared according to patient age, gestational age and country and degree of hydronephrosis involvement. The study is of a retrospective and prospective nature, it was conducted at SBAGAL "Prof. Dr. D. Stamatov" Ltd, Varna, and in the Urological Clinic at "St. Anna", Varna and covers a three-year period, from 2019 until 2021.

Chapter material and methods of the dissertation work is presented clearly. The results are presented graphically in tabular and graphical form and explained in detail in the text. The main symptoms of complicated hydronephrosis are discussed. The safest and most affordable diagnostic methods are approved. The dissertation examines in depth the relationships between the term of pregnancy, the degree of hydronephrosis, the various complications and others, respectively, with the therapeutic approaches. Based on these relationships, a clinically oriented diagnostic-therapeutic algorithm has been developed and proposed.

The scientific work of Dr. Dimitrova ends with presented 9 conclusions on the subject. The conclusions are meaningful, meet the set tasks and fully prove the fulfillment of the scientific goal. The main contribution of original nature of the dissertation is the developed diagnostic-treatment algorithm for pregnant women with hydronephrosis, which is widely used in medical practice. Evidence has been obtained to support the opinion that hydronephrosis during pregnancy is more common after 20 years of age and requires more frequent treatment. It is confirmed that the main imaging tool for the diagnosis and follow-up of hydronephrosis, regardless of the gestational age of the pregnancy, is the ultrasound examination. It has been established that the most common causative agent isolated from urine, a complication of uroinfection hydronephrosis, is *Esherichia coli*. It has been shown that in pregnant women with evidence of symptomatic hydronephrosis, the presence of bilateral high-grade hydronephrosis is associated with a higher incidence of acute kidney injury.

In conclusion: The dissertation work of Dr. Zlatka Dimitrova has an undeniable scientific contribution to the clarification of diagnostic approaches and clinical behavior in hydronephrosis during pregnancy.

The scientific work fully meets the scientometric criteria for awarding the educational and scientific degree "Doctor".

I give a positive assessment of the scientific work and express an opinion to the respected scientific jury to award Dr. Zlatka Georgieva Dimitrova-Sandulova the educational and scientific degree "Doctor" in the specialty of Obstetrics and Gynecology.

.08.2022

Stara Zagora

Prepared the opinion:

Assoc.Prof. Maria Angelova Ph.D.