

МЕДИЦИНСКИ УНИВЕРСИТЕТ - ВАРНА
"Проф. д-р Параскев Стоянов"

Ул. "Марин Дринов" 55, Варна 9002, България
Тел. : 052/65 00 57, Факс: 052/65 00 19
e-mail: uni@mu-varna.bg, www.mu-varna.bg



MEDICAL UNIVERSITY – VARNA
"Prof. Dr. Paraskev Stoianov"

55, Marin Drinov Str., 9002 Varna, Bulgaria
Tel. : + 359 52/ 65 00 57, Fax: + 359 52/ 65 00 19
e-mail: uni@mu-varna.bg, www.mu-varna.bg

REVIEW

From Prof. Dr. Emil Georgiev Kovachev, PhD

Manager SBAGAL - Varna

Head of the Department of Obstetrics and Gynecology at MU - Varna

Regarding the dissertation for awarding the scientific-educational degree "Doctor", scientific specialty Obstetrics and Gynecology (03.01.45), Department of Obstetrics and Gynecology, Medical University - Varna.

Dissertation topic: "Methods of termination of pregnancy in obstetric and gynecological practice"

Author of the dissertation - Dr. Zhivko Stoyanov Zhekov

Scientific adviser: Assoc. Prof. Dr. Kremen Tsvetkov, MD

The dissertation presented for defense contains a total of 150 standard pages and is illustrated with 25 tables and 72 graphs.

The bibliography contains 207 literary sources, of which 33 in Cyrillic and 174 in Latin.

Relevance of the problem

In his dissertation, Dr. Zhekov considers a contemporary problem of exceptional medical and social significance. Abortion is the most common gynecological procedure, with more than 56 million abortions worldwide each year, the largest percentage of which is in developing countries. In recent years, the efforts of physicians have focused mainly on improving the conditions and techniques for performing abortions, as well as in terms of efficiency, safety and reduced risk of complications.



The use of prostaglandins and subsequently progesterone inhibitors as a method of termination of pregnancy (medical abortion) significantly increases the effectiveness and reduces complications in performing this manipulation.

Despite some advantages of medical abortion over conventional abortion, further research is needed in the future to improve analgesic methods and additional approaches in cases of incomplete abortion using the medical method.

The review of the literature clearly shows that the dissertation has thoroughly studied a variety of contemporary literary sources. The review has good cognitive value, describing the risk factors for early and late complications in patients after medical and surgical abortion.

The aim of the study is to perform a comparative analysis of the methods used for abortion (surgical and medical) in modern obstetrics and gynecology, optimizing the criteria for the application of procedures in the I and II trimesters of pregnancy.

The tasks of the dissertation are clearly formulated and are 6 in number, as of interest are 1, 2, 3, 4 and 5 tasks, namely:

1. To make a comparative analysis of the structure of the studied groups of patients with indications for medical and surgical abortion during the I and II trimesters of pregnancy.
2. To perform a comparative analysis of modern medical and surgical methods of abortion during the first trimester of pregnancy: Mifepristone and Misoprostol against vacuum aspiration in terms of safety, efficacy, success, menstrual disorders, early and late complications.



3. To carry out a comparative analysis of modern medical and surgical methods of abortion during the second trimester of pregnancy: Mifepristone and Misoprostol against dilatation and evacuation in terms of safety, effectiveness, success, menstrual disorders, early and late complications.
4. To determine the risk factors for early and late complications in patients after medical and surgical abortion.
5. To derive the criteria for the application of medical and surgical abortion during the I and II trimesters of pregnancy.

Material and methods

A prospective and retrospective study of 420 pregnant women in the first and second trimester was conducted in the period 2013 to 2018 in SBAGAL "Prof. Dr. D. Stamatov "Ltd. - Varna and MHAT" St. Anna "- Varna. Patients were selected based on whether they had an induced abortion during the first and second trimesters, as well as on the type of abortion (medical or surgical abortion). Two groups have been formed: Group I - abortion in the first trimester and Group II - abortion in the second trimester.

The following research methods and the corresponding method of abortion were used:

- Medical abortion in the I trimester (MA I) -1 table. Mifepristone 200 mg orally, followed by 36 hours of taking 2 tablets of Misoprostol (Topogyne) of 400 mcg orally or sublingually every 2 hours.
- Medical abortion in the II trimester - two therapeutic schemes depending on which part of the day you want to complete the abortion:



- First: 1 tablet Misoprostol (Topogyne) of 400 mcg 20.00 h placed in the posterior vaginal vault, followed by 1 tablet Misoprostol (Topogyne) of 400 mg subbuccal at 23.00 h and 01.00 h.
- Second: 1 tablet. Misoprostol (Topogyne) of 400 mcg 24.00 h placed in the posterior vaginal vault, followed by 1 tablet Misoprostol (Topogyne) of 400 mg subbuccal at 02.00 h and 04.00 h.
 - ✓ Vacuum aspiration
 - ✓ Dilation and evacuation

Diverse statistical methods are applied.

Own results and discussion

Medical abortion in the I and II trimester is highly effective (91.4 ÷ 95.7% completed abortion) and safety, requiring time for expulsion of uterine contents - an average of 7 hours (I trimester) and 8 hours (II trimester). The relative share of early complications in medical abortion in the first trimester is two to three times higher than in vacuum aspiration. The use of medical abortion in the second trimester is associated with a reduction in the risk of infertility. The relative proportion of early complications of vacuum aspiration is two to three times less than that of medical abortion in the first trimester. The risk of developing a hematometra and endometritis is higher with vacuum aspiration compared to medical abortion in the first trimester. In dilatation and evacuation, the highest percentage of early complications is: abdominal and pelvic pain (20.0%), prolonged hemorrhage (5.7%) and endometritis (1.3%), with gastrointestinal symptoms being with less frequency. The use of surgical abortion through dilatation and evacuation is associated with a higher relative risk of infertility and late complications.

Risk factors for these late complications include previous vaginal infection, abortion, and a cesarean section.



Evaluation of conclusions and contributions

In his work, Dr. Zhekov formulates 8 conclusions and 8 contributions, dividing his contributions into two categories: contributions of original character and contributions of confirmatory nature. It is especially important to emphasize the contributions of an original nature, namely:

1. For the first time in the country, a survey was conducted that measured the relative risk of early and late complications in medical and surgical abortion in the I and II trimesters of pregnancy
2. An optimized approach was proposed in the selection of patients for termination of pregnancy - vacuum aspiration for the first trimester, medical abortion - for the II trimester for patients without risk and dilatation and curettage for patients at risk (two or more abortions or cesarean sections).
3. An algorithm for application of Topogyne is implemented for medical abortion in the II trimester
4. The economic expediency of the methods for termination of pregnancy in the I and II trimester.

Critical notes and advice

Dr. Zhekov has complied with all previously made critical remarks and has correctly noted in the bibliography some Bulgarian developments in this direction.



Teaching activity

Dr. Zhekov graduated in medicine in 1987. in MU - Varna. He acquired a specialty in Obstetrics and Gynecology in 1993. He is enrolled in a free doctorate in 2018. Since 2016 is a full-time assistant at the Department of Obstetrics and Gynecology at MU - Varna. Dr Zhekov participated in many courses and specialized trainings in the field of gynecological endoscopy, as well as ultrasound and Doppler diagnostics. The announced scientific publications in connection with the dissertation are three. Proficiency in English is an additional prerequisite for in-depth scientific knowledge.

Conclusion

The presented dissertation of Dr. Zhekov "Methods of termination of pregnancy in obstetric and gynecological practice" is relevant and meets the generally accepted criteria. In modern medicine, medical abortion is the method of choice for terminating a pregnancy in the first and second trimesters. I would like to recommend to the esteemed members of the Scientific Jury to vote positively for awarding the scientific and educational degree "Doctor" in the scientific specialty "Obstetrics and Gynecology" to Dr. Zhivko Zhekov, according to the Regulations for the development of the academic staff at the Medical University - Varna .

Date: 02.04.2021

Prof.dr. E. Kovachev, PhD