

REVIEW

From Prof. Dr. Emil Georgiev Kovachev, MD

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Subject: 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.

Topic of the dissertation: "Genitourinary syndrome of menopause in women after hormonal, surgical and radiation castration"

Author of the dissertation - **Dr. Pavel Petrov Dobrev**

Scientific adviser: Prof. Dr. Jawor Kornowski, MD

The dissertation presented for defense contains a total of 122 standard pages and is illustrated with 21 tables and 15 figures.

The bibliography contains 167 literary sources, of which 16 in Cyrillic and 151 in Latin.

Relevance of the problem

In his dissertation, Dr. Dobrev discusses a contemporary problem of medical and social significance. Genitourinary syndrome in menopause is a set of symptoms that develop after menopause due to low estrogen levels and hypo- and atrophic changes in the genitourinary tract of women. In addition to vaginal dryness and dyspareunia, there are different frequencies of urinary complaints, such as dysuria, pollakiuria, nocturia, imperative incontinence, overactive bladder and frequent urinary tract infections.

The review clearly shows that the dissertation has thoroughly studied a variety of contemporary literary sources. The review has good cognitive value.

The aim of the study was to investigate the frequency and various manifestations of genitourinary atrophy syndrome after surgical and drug (hormonal and chemotherapy) castration.

The tasks of the dissertation are clearly formulated and are 8 in number:

1. To determine the frequency distribution of all patients included in the study, according to: vaginal pH; vaginal content; amount of lactobacilli; subjective vulvo-vaginal and urinary symptoms
2. To determine the vaginal pH, vaginal content and amount of lactobacilli after both types of castration (surgical and medical)
3. To determine the frequency of subjective symptoms related to the vaginal component of the genitourinary syndrome in menopause (GSM) - dyspareunia, vaginal dryness and pruritus vulvae (dryness of the vulva) after both types of castration (surgical and medical).
4. To determine the frequency of subjective symptoms associated with the urinary component of the genitourinary syndrome in menopause (GSM) -

nocturia, dysuria, pollakiuria, imperative incontinence, stress incontinence, mixed incontinence after both types of castration (surgical and medical)

5. To determine the prognostic significance of the factors - age, type of castration, cancer for dyspareunia, vaginal dryness, pruritus vulvae, vaginal pH, vaginal content and the number of lactobacilli.

6. To determine the prognostic significance of the factors - age, type of castration, oncological disease for nocturia, dysuria, pollakiuria, imperative incontinence, stress incontinence, mixed incontinence.

7. To make a comparative analysis between both types of castration: surgical and medicinal in terms of symptoms that form the vaginal component of genitourinary syndrome in menopause (GSM) - dyspareunia, vaginal dryness, vaginal pH, vaginal content, lactobacilli.

8. To make a comparative analysis between the two types of castration: surgical and medical in terms of symptoms that form the urinary component of genitourinary syndrome in menopause (GSM) - nocturia, dysuria, pollakiuria, imperative incontinence, stress incontinence, mixed incontinence.

Material and methods

To fulfill the goal and tasks of the dissertation, a prospective clinical and epidemiological study (2021) was conducted, covering 67 patients, 35 of them with surgical castration and 32 with drug therapy (chemotherapy and / or hormone therapy). The data were collected through a questionnaire to assess the subjective symptoms of patients.

To perform the set tasks, Dr. Dobrev used the following methods:

Statistical methods (descriptive, graphical, non-parametric tests)→

Drug castration in the application of chemotherapy and / or hormone therapy→

Surgical castration→

Microbiology of vaginal secretions→

Questionnaire for assessment of subjective symptoms→

Own results and discussion

Cervical cancer and breast cancer are the most common cancers that can affect younger women with preserved ovarian function. As a result of the applied treatment of these diseases leads to castration (removal and cessation of ovarian function) and the development of various symptoms of genitourinary syndrome in menopause. The study showed that patients with surgical castration (bilateral adnexectomy), as part of the surgical treatment of cervical cancer, develop symptoms of vaginal dryness and dyspareunia. These symptoms may impair quality of life by affecting sexual function and interpersonal relationships to a greater extent than after drug castration in patients with breast cancer. Therefore, the recommendation that can be made is to preserve the ovaries in the surgical treatment of younger women with cervical cancer - on the one hand, and on the other - to avoid bilateral adnexectomy (ovariectomy) in women with

preserved ovarian function and carcinoma of the mammary gland after chemotherapy and / or hormone therapy.

Evaluation of conclusions and contributions

In his work, Dr. Dobrev formulates 9 conclusions and 7 contributions as some of them are of an original nature, namely:

1. A questionnaire was created to assess the subjective symptoms of genitourinary syndrome in menopause - vaginal dryness, dyspareunia, pollakiuria, dysuria, nocturia, stress incontinence, imperative and mixed incontinence, on 67 young patients with cancer after surgical and medical castration.
2. The vaginal secretion of 67 young patients with cancer after surgical and drug castration was examined in terms of vaginal content, the number of lactobacilli, vaginal pH.
3. The frequency of the individual symptoms of the vaginal and urinary component of the genitourinary syndrome in menopause in the studied contingent has been established.
4. The predictive significance of the factors age, type of oncological disease and type of castration for the occurrence of separate manifestations of the vaginal and urinary component of the genitourinary syndrome in menopause in the studied group has been analyzed.
5. A comparative analysis of the two types of castration in terms of the occurrence of subjective and objective symptoms of the vaginal and urinary components of the genitourinary syndrome in menopause has been done.
6. Patients after surgical castration and cervical cancer have been found to have symptoms of vaginal dryness and dyspareunia that affect quality of life, significantly more than patients with drug castration and breast cancer.

Critical notes and advice

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

Teaching activities

Dr. Pavel Petrov Dobrev was born on 23rd June, 1986. He graduated from the Medical University - Varna in 2011, majoring in Obstetrics and Gynecology in 2016. Since 2019 he has had a master's degree in Health Management. He worked as a doctor at the Complex Oncology Center - Burgas in the Department of Oncogynecology from 2016 to 2019. He has held the position of Head of the Oncogynecology Department since 2019.

Conclusion

The presented by Dr. Dobrev dissertation "**Genitourinary syndrome of menopause in women after hormonal, surgical and radiation castration**" is relevant and meets the generally accepted criteria. I would like to recommend to the esteemed members of the Scientific Jury to vote positively for the award of scientific and educational degree "Doctor"

in "Obstetrics and Gynecology" to Dr. Pavel Dobrev, according to the Regulations for the development of academic staff at the Medical University - Varna .

Date: 09.06.2022.

Prof. Dr. E. Kovachev, MD

