

To:
The Chairman of the Scientific committee,
Stated by order No 15-05-09^{#1} from 30 Jan 2024,
jointly issued by the Executive Director
and the Procurator of
Acibadem City Clinic UMBAL “Tokuda”, Sofia

REVIEW

from

Assoc. Prof. Dr Nikola Bojilov Vassilev, MD
Lecturer of Obstetrics and Gynecology in the Medical Faculty of the
“St. Kliment Ohridsky” Sofia University,
regarding competition for the acquisition of the academic position "Professor"
In the field of higher education 7. "Health and sports", professional direction 7.1
"Medicine" and scientific specialty „Obstetrics and Gynecology” for the needs of the
Clinic of Obstetrics and Gynecology at Acibadem City Clinic UMBAL “Tokuda” Sofia,
published in the State Gazette, issue 98 from 24.11.2023

One candidate participated in the current competition: **Assoc. Prof. Dr Petar Tsankov Markov, MD**. The candidate has submitted all the documents in an orderly form as required in the Law for the Development of the Academic Staff in the Republic of Bulgaria (ZRASRB) and the Regulations for its application.

BIOGRAPHICAL DATA AND CAREER PROFILE OF THE CANDIDATE

Dr P. Markov graduated in medicine in 2002 at the Faculty of Medicine (MF) at the Medical University Sofia (MU-Sofia). Until then, he had a two-year internship as a computer expert at the company "Apis" and at the National Center for Sports Medicine.

From 2003 to 2007, Dr P. Markov **specialized** in obstetrics and gynecology (Ob&Gyn) at the Department of Obstetrics and Gynecology of the Medical Faculty at the Medical University Sofia, based in SBALAG "Maichin Dom" Sofia hospital.

From 2007 to 2021, Dr P. Markov held the position of "manager" in the Ob&Gyn Center "Markovs" OOD Sofia. In addition to management, he performed diagnostic and treatment activities there.

From 2009 to 2017, Dr P. Markov worked as a doctor in the First Clinic of Operative Gynecology of SBALAG "Maichin Dom" Sofia, while at the same time he was also an educator (assistant -> senior assistant -> chief assistant) in the Department of Ob&Gyn at the MF of the MU-Sofia.

In 2015, after successfully defending his dissertation at the Faculty of Public Health (FPH) of the MU-Sofia, Dr P. Markov obtained the educational and scientific degree "**Doctor of Medicine**".

In 2012–2020, Dr P. Markov was an assistant, later - an associate professor at the Health Care Department of the FPH at the MU-Sofia.

From 2018 to 2021, Dr P. Markov is the head of the Ob&Gyn department at Acibadem City Clinic UMBAL "Tokuda" Sofia.

From 2022 until today, Assoc. Prof. Dr P. Markov is the head of the Ob&Gyn clinic in the same hospital, as well as executive manager of the Trinity Medical Center Sofia.

SCIENTIFIC ACTIVITY OF THE CANDIDATE

Assoc. Prof. Dr P. Markov participated in the current competition with **127 titles** of scientific works, produced by his scientific activity after the already reviewed works for the previously awarded academic position "Associate Professor". Among them:

- **Publications in full text in journals - a total of 83 items**, of which:
 - o in Bulgarian editions – 67
 - o in foreign editions – 16
- **Publications in summaries** – 10, all of which in foreign editions
- **Participation with lectures in scientific forums in Bulgaria and abroad** – 27
- **Citations after achieving the academic title "Associate Professor" in 2016 - 185**, of which:
 - o in Bulgarian sources – 121
 - o in foreign sources – 64.
- **Impact factor** – 53.44
- **H-index calculated from SCOPUS database** – 3

The problems addressed in the scientific production of Assoc. Prof. Dr P. Markov, published after the achievement of the academic title "Associate Professor" can be divided into the following categories:

- **Food and nutrition during pregnancy and in non-pregnant state** - 38.
- **Ultrasound diagnostics** – 12.
- **Obstetric-gynecological propaedeutics, ethics and deontology** - 4.
- **Case report** – 1.

The scientific works of Assoc. Prof. Dr P. Markov are notable with a logical structure, a rich literary justification, a decent volume of the studied population sample, objective analysis and synthesis of the results, objective and at the same time sparing formulation of the conclusions, refined style and excellent expertise of the Bulgarian linguistics.

EDUCATIONAL ACTIVITY OF THE CANDIDATE

Participation in the compilation of textbooks and monographs

Assoc. Prof. Dr P. Markov is the sole author of the chapter "Anatomy of the female genital organs" in "Gynecology: a textbook for students and specialists", Prof. A. Dimitrov and V. Zlatkov, issued by "ARSO", Sofia, 2017.

Assoc. Prof. Dr P. Markov participated as the sole author of one chapter and co-author of another chapter in "Manual of Preventive Medicine", issued by "Science and Society", Sofia, 2017.

Assoc. Prof. Dr P. Markov has participated as a co-author in 12 monographs, one of which was published abroad.

In addition, Assoc. Prof. Dr P. Markov published in 2023 the monograph “*Placenta previa. Endspiel*” as the sole author. As far as he offers this monograph as a thesis for this academic position, let's look at it in a little more detail.

Short (and appraising) reviews of *Placenta Previa. Endspiel* are placed at the very beginning of the monograph. Their authors are Prof. Dr A. Nikolov and Prof. Dr Y. Kornovski - two obstetrician-gynecologists with encyclopedic erudition, extensive clinical experience and indisputable authority in the professional circles. I fully agree with the conclusions of the two professors, but I allow myself to comment on this monograph in my own words.

1. In essence: For me, *Placenta pervia. Endspiel* is a unique phenomenon in Bulgarian (and not only Bulgarian) medical literature. The author explains to the smallest detail a force majeure clinical problem in the obstetric practice - placenta previa (PP) in combination with excessive trophoblastic invasion of the uterine musculature, sometimes also towards adjacent pelvic organs (PAS). This combination usually causes dramatic (sudden and abundant) blood loss. It should be borne in mind that intra- and postpartum blood loss is the most common cause of maternal mortality in modern obstetrics, displacing the position of infections from this fatal first place, which was the number one enemy of the obstetrician in the not so distant past. At the same time, the author has achieved the seemingly impossible - to combine a precise presentation of indisputable medical truths with a rare lightness of speech, which makes the entire text extremely readable, devoid of dry didacticism and elements of overvalued thinking that make such works hard to digest and ultimately result in annoyance of the reader.

I would like to highlight the following author's considerations and recommendations as particularly valuable to the clinician reader:

- 1.1. Comparison of the effects of ligation of bleeding vessels and intravascular balloon occlusion – pp. 70–71.
- 1.2. Description of Parallel Compression Sutures of the uterus by Whu – pp. 76–85.
- 1.3. Arguments for total over subtotal hysterectomy – pp. 97–98.
- 1.4. Recommendation to refrain from attempting placental extraction in cases with PAS. Placenta and uterus removed en bloc in 46% of author's own material - page 99 and page 103.
- 1.5. Recommendation for preoperative cystoscopy and stenting of the ureters (before initiation of CS of a pregnant woman with PP + PAS) - page 113.
- 1.6. Recommendation for applying reinforcing sutures to thinned areas of the bladder wall - page 116.
- 1.7. Description of operative technique for interposition of a peritoneal flap between the vagina and bladder - page 116.
- 1.8. Recommendation for the use of a three-way bladder catheter - page 116.
- 1.9. Undeviating recommendation for cesarean hysterectomy in cases with spontaneous uterine rupture - page 144.
- 1.10. A persuasive plea for the advantages of the so-called Centers of excellence (CoE) compared to regular medical facilities - page 148.

2. On some details: In the following subsections, I share mostly technical remarks. They are a kind of fatherly advice to the author and in no case should be perceived as criticism. My evaluation of his work does not depend on them.

2.1. On the layout and design:

- 2.1.1. Titles marked with Roman numerals (I, II, III, IV) are the *so-called first row titles*. However, the title "IV. Substantial part" is followed by the title "V. Preparation", "VI. Intraoperative considerations", "VII. Blood loss" etc., to "XI. Casuistics". What Titles V-XI have in common is that they are in fact components of the "Substantial Part", i.e. they appear as 2nd row titles. It is better if they are all numbered with Arabic numerals, for example: "4.6. Hysterectomy; 4.6.1. Peripartum hysterectomy; 4.6.1.1. Total or subtotal hysterectomy" etc.
- 2.1.2. Abbreviations used - the order of terms is chaotic. The order should obey two principles: a) in alphabetical order; b) first all abbreviations in Cyrillic, then all abbreviations in Latin.
- 2.1.3. It seems appropriate to me that the texts under the heading "**Blood loss**" and under the heading "**Measures to control bleeding**" should be combined.
- 2.1.4. Too often we see "anesthesiologic" instead of "reanimation" and "anesthetist" instead of "reanimation specialist" (or even better "intensive care provider").
- 2.1.5. The "Around the World and at Home" template TV tease is cute but inaccurate. In this monograph, "at Home" does not mean "in Bulgaria", but "in the hospital where the author works".
- 2.1.6. Figures and tables
- when they are borrowed from a foreign author/s, all text designations should be translated into Bulgarian (see table 1 on page 33, fig. 20 on page 62, fig. 30 on page 95¹, table 2 on page 96, table 3 on page 112, table 4 on page 114);
 - most figures are double, there are also triple ones (e.g. fig. 33, fig. 36) - it is correct that each component is marked with a letter or number, and in the text below the figures there should be explanations of what is what.
 - most photographs of an operative field need superimposed labels or numbers to indicate the individual structures.

2.2. On terminology:

- 2.2.1. **ЯМР** - page 10 and elsewhere. This ugly abbreviation of the physical phenomenon *nuclear magnetic resonance* has no place in the otherwise refined text. It is recommended to replace it with the name of the study itself - MRI = *magnetic resonance imaging*.
- 2.2.2. The author has paid tribute to a certain reverence for English terminology. Examples: "**administration** of medications" – p. 56, "arteriovenous **fistulas**" - p. 62, "**detection** of central blood pressure" - p. 69, "**application** of sutures"² - p. 78, "**non-pregnant state**" – p. 84, "surgical **specimens**"³ – p. 103; "**management** of pregnancy" – p. 137; "**compartmentalization**"⁴ - p 147.

1. The depiction of this figure is not entirely clear.

2. Instead of "налагане на шевове"

3. In Bulgarian language the word "specimen" means *handwritten signature presented to the bank*

4. The basic term is *compartment*. The sound "I" is absent in the English word, but it is preserved in the other European languages

- 2.2.3. "... dissection and **liberalization** of the ureter" - p. 121. It is nonsense - a little further on (p. 124) the more accurate term "**liberation** of the lateral ureter" is preferred. In fact, in both cases the Bulgarian word "освобождаване" is far more understandable, without in any case vulgarizing the scientific statement. The use of the verb "lateralize" leaves a similar impression – p. 122.
- 2.2.4. "During operative delivery... these problems are even more **aggravated**" – p. 125. In forensic medicine, the verb "aggravated" denotes a presentation of a disease symptom as more severe than reality. If the disease symptom is absent and the patient invents it, the verb is "simulate".
- 2.2.5. On p.31, p.68 and elsewhere we read "this **pathology**". Alas, the use of "pathology" in the sense of "set of diseases" is firmly embedded in Bulgarian medical jargon. The basis of this term are Old Greek. words "πάθος" = suffering, disease and "λόγος" = knowledge, cognition. Hence the name of the medical specialty "pathology" = knowledge of diseases, but not "a collection of diseases".
- 2.2.6. Two cases of pleonasms: a) "etiological causes" – p. 95; b) "*This case is casuistic*" - p 99. Strictu sensu every case is casuistic.
- 2.3. Technical (typing and spelling) errors**
- 2.3.1. "Тази поредица от битки, които им предстоят" – p. 23.
- 2.3.2. "... the average gestational age becomes 34+4 weeks" should probably read "34±4 years" – p. 33.

Academic activities

For the last 5 academic years, Assoc. Prof. Dr P. Markov has an educational load of 1,097 academic hours or about 219 academic hours per year.

These hours are distributed as follows:

- lectures at the "Health Care" Department of the Faculty of Public Health at MU-Sofia;
- management of Ob&Gyn residents (currently – 5 colleagues);
- participation in examination committees in the Medical Faculty of "St. Kliment Ohridsky" Sofia University (semester and state exams in English).

CONTRIBUTIONS FROM THE SCIENTIFIC ACTIVITY OF THE CANDIDATE

The scientific and practical contributions of Assoc. Prof. Dr P. Markov can generally be divided into the following categories:

- delivery in cases with PP and abnormal placentation;
- high-risk pregnancy, twin pregnancy;
- medical-social and medical-ethical problems;
- impact of nutrition on the health of risk groups;
- ultrasound in obstetrics and gynecology.

A detailed analysis of the contributions grouped in the subcategories "Contributions of an original nature", "Contributions of an applied nature" and "Contributions of a methodical nature" can be found in the applicant's self-assessment, an integral part of the competition documents. I fully accept the reasoning and conclusions presented in this self-assessment.

DIAGNOSTIC AND THERAPEUTIC ACTIVITIES OF THE CANDIDATE

Assoc. Prof. Dr P. Markov has a decisive role in the diagnostic and treatment activities in the Clinic of Obstetrics and Gynecology at Acibadem City Clinic UMBAL "Tokuda" Sofia.

Between 800 and 900 gynecological operations are performed annually in the Ob&Gyn Clinic headed by Assoc. Prof. Dr P. Markov. The number of deliveries at this Clinic varies between 1,500 and 1,600 per year, and for the calendar year 2023, the number is approaching 1,700.

CONCLUSION

According to the NACID report on the fulfillment of the minimum national criteria for occupying the academic position "Professor", **Assoc. Prof. Dr P. Markov collects 2046 points compared to the minimum requirement of 550 points.**

I believe that the data highlighted so far in this review are more than sufficient argument to award him the academic position in question. However, these data create only a vague idea of the qualities of Assoc. Prof. Dr P. Markov as an academic, researcher and clinician.

I dare to say that Assoc. Prof. Dr P. Markov deserves the title of "Professor" even alone with his monograph **Placenta previa. Endspiel.**

Many of his scientific publications are in the field of "food and nutrition". I do not take on myself to comment in extenso on this matter, but in return I consider that I can allow myself to assess the abilities and potential of Assoc. Prof. Dr P. Markov in the fields of clinical and operative obstetrics, clinical and operative gynecology and oncogynecology. I declare that in these areas Assoc. Prof. Dr P. Markov is one of the best specialists (clinicians and lecturers) in Bulgaria. Unfortunately, his teacher, the brilliant obstetrician-gynecologist, urologist, surgeon and oncologist Bozhidar Slavchev is no longer with us. I know he was proud of his student and I can imagine how proud he would be of him, here and now.

Having shared these thoughts of mine, I can say that

I strongly recommend

to the honorable members of the Scientific Jury to vote positively for awarding the academic position "Professor" in the scientific specialty "Obstetrics and Gynecology" to Petar Tsankov Markov, PhD in regard to the competition announced for the needs of the Clinic of Obstetrics and Gynecology at Acibadem City Clinic UMBAL "Tokuda" Sofia.

March 27th, 2024

Review prepared by:



(Assoc. Prof. Dr Nikola Vassilev, MD)