



OPINION

of Assoc. Prof. Dr. Liliya Georgieva Aleksandrova-Zisova, MD
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On the dissertation paper for the award of **PhD**
area of higher education 7. Health and Sport,
professional field 7.1 Medicine,
Doctoral Program "Dermatology and Venereology"
on topic

"CLINICAL AND THERAPEUTIC STUDIES OF ALOPECIA AREATA"

Author: Dr. Liliya Todorova

Form of PhD: full-time PhD student

Department of Dermatology and Venereology, Faculty of Medicine, Medical
University - Plovdiv

Scientific supervisor: Dr. Tsvetana Abadzhieva, MD

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1. General presentation of the procedure

On the basis of the Order N P 384/ 29.01.2024 of the Rector of Medical University - Plovdiv, I have been elected as a member of the scientific jury for the award of PhD scientific degree.

The set of materials submitted to me on electronic media is in accordance with the procedure for acquisition of the educational and scientific degree "Doctor" and the scientific degree "Doctor of Sciences" at MU Plovdiv from 2021 and includes the following documents:

- Dissertation paper
- Abstract
- List and copies of scientific publications and communications on the topic of the dissertation
- Minutes of the Departmental Council for Enrolment

The PhD student has attached 4 publications related to the dissertation.

2. Brief biographical data on the PhD student

Dr. Lidiya Nikolova Todorova was born on 23.07.1985 in Plovdiv.

She completed her secondary education at the Exemplary Mathematical High School "Academician Kiril Popov", Plovdiv with excellent grades.

She graduated from Plovdiv University "Paisiy Hilendarski", Faculty of Philosophy and History in 2008.

She graduated from the Medical University of Plovdiv in 2018 with excellent grades.

Since November 2019, after winning a competition, she has been enrolled as a full-time PhD student at the Department of Dermatology and Venereology at the Medical University of Plovdiv,

with the topic of her PhD thesis "CLINICAL AND THERAPEUTIC STUDIES OF ALOPECIA AREATA" and scientific supervisor Assoc. Prof. Dr. Tsvetana Abadzhieva, MD.

Since April 2020 Dr. Todorova has been conducting regular specialization in skin and venereal diseases at the Clinic of Skin and Venereal Diseases , University Hospital "St.George" – Plovdiv, with Head of the clinic Prof. Dr. Hristo Dobrev, MD.

Dr. Lidiya Todorova is fluent in English, German and Russian and has computer literacy.

Her research interests are mainly in the field of trichology.

Dr. Todorova is the first author or co-author in a total of 4 publications in scientific journals and collections.

Dr. Todorova is a member of EADV / European Academy of Dermatology and Venereology/, International Society of Dermoscopy, International Society of Trichoscopy, Eastern European and Asian Hair Research Society, Bulgarian Dermatological Society and Bulgarian Medical Association.

3. Topical relevance

Alopecia areata is a T-cell mediated autoimmune disease characterized by loss of immune privilege of the hair follicle.

Clinically, it manifests with non-cicatricial hair loss in the form of single or multiple well circumscribed oval hairless patches of varying size.

Alopecia areata can occur alone or may be seen with a number of comorbidities. The most common ones include autoimmunity and thyroid dysfunction, atopic dermatitis, psoriasis, allergic conditions. Other comorbid conditions include other autoimmune, inflammatory, other dermatological and psychiatric diseases.

Treatment options for alopecia areata show limited success, as no therapy is able to prevent disease recurrence.

The dissertation paper is topical.

The dissertation research has scientific and practical value, explores epidemiological, clinical, therapeutic and immunological aspects in patients with alopecia areata. The studies performed expand the knowledge of the dermatologist.

4. Knowledge of the problem

Dr. Todorova has presented an extensive review and bibliography from which it is evident that the PhD student has sufficient knowledge of the problem.

5. Research methodology

The study included a total of 98 patients diagnosed at the Clinic of Skin and Venereal Diseases at "St. George" University Hospital, Plovdiv, for the period from November 2019 to June 2023.

In her dissertation research, the doctoral student used medical history, clinical methods - a method of analyzing the data collected from the medical history;

Laboratory methods - enzyme-linked immunosorbent assay (ELISA); method of PRP administration; method of assessing the severity of alopecia areata; method of trichoscopic assessment of alopecia areata; method of assessing pain level during PRP administration; method of assessing the quality of life; appropriate statistical methods.

The chosen methodology of the research allows fulfillment of the goal and objectives set out in the dissertation paper.

6. Characteristics and evaluation of the dissertation paper and the contributions

The dissertation paper was written in 148 standard typewritten pages and illustrated with 13 tables, 13 figures and 16 appendices. The bibliography contains 205 references, of which 10 are in Cyrillic and 195 in Latin.

It contains: introduction, literature review, own research with aim and objectives, material and methods, results and discussion, findings and conclusions, contributions, bibliography, list of publications and contributions on the topic, acknowledgements.

The introduction and the review are written in a fair length and show very good awareness of the developed problem. The literature review is informative and comprehensive.

The aim and objectives of the dissertation paper are clearly and precisely formulated.

Dr. Lydia Todorova has set a clear and precise goal:

To investigate the demographics, associated diseases, the role of stress, the impact of COVID-19 and COVID-19 vaccination and the effect of the PRP therapy in patients with alopecia areata.

The studies are grouped into eight main areas:

A study of demographics in patients with alopecia areata

Associated diseases in patients with alopecia areata

Impact of COVID-19 and vaccination against COVID-19

Impact of stress

Therapeutic study

Assessment of the quality of life

Assessment of the pain level at first PRP application

Trichoscopic study

Based on the research, a conclusion was drawn - Autologous PRP is an alternative treatment for alopecia areata. PRP has shown effective results in patients with mild and moderate form of alopecia areata and can be recommended to patients with *AA partialis* and *AA barbae*.

In patients with *AA reticularis* the therapy is not convincing and the advice is to choose another treatment approach or combine PRP with another method.

In patients with severe alopecia areata, *AA ophiasis* and AT, PRP therapy is ineffective. It is recommended that patients be screened for thyroid pathology and anti-TG IgG and anti-TPO IgG AT prior to treatment in order to proceed with PRP administration.

7. Evaluation of the contributions

7 conclusions are drawn

The dissertation contributions are 6 in number.

Contributions of original nature: 1

Scientific contributions of original nature for Bulgaria: 4

Contributions of scientific and practical-applied nature: 1

All contributions can be accepted.

8. Assessment of the publications and the personal contribution of the PhD student

Publications related to the dissertation paper: 4.

Publications in Bulgarian journals: 4 .

The number of presented publications meets the required quantitative criteria set out in the Regulations for Academic Development of the Medical University of Plovdiv.

9. Personal participation of the PhD student

Dr. Todorova was personally involved in the research related to the dissertation paper. The obtained results, conclusions and contributions are entirely to her credit.

10. Abstract

The abstract is 59 pages long. The abstract is a summarized version of the material included in the dissertation paper.

11. Critical comments and recommendations

Dr. Todorova has complied with all the recommendations of the expanded Departmental Council.

Autologous PRP therapy is already practiced in many centers in our country, but until now there is a lack of scientific studies on this topic.

Conclusion

In conclusion, Dr. Lidiya Todorova has selected a topic of current concern for her dissertation paper, has correctly formulated the goals and objectives, has used research methods, has made relevant conclusions and contributions of a scientifically theoretical nature and scientifically applied nature.

The dissertation paper shows that the PhD student Dr. Lidiya Todorova **possesses** in-depth theoretical knowledge and professional skills, **demonstrating** qualities and abilities for independent scientific research.

I confidently give a **positive assessment** of the conducted research and propose the honorable scientific jury to award the educational and scientific degree of PhD to Dr. Lidiya Todorova in the PhD program in Dermatology and Venereology.

20.02. 2024

Reviewer:.....
/Assoc.Prof. Dr. Liliya Georgieva Aleksandrova-Zisova, MD/

Заложено на основание
Чл.5 §1, 6, 7б) Регламент (ЕС)2016/679