

## OPINION

According to Order No. R-109-449/18.11.2022 of the Rector of MU-Varna  
by Prof. Dr. Dimitrichka D. Bliznakova, dm

Subject: competition for the acquisition of the scientific degree "doctor" of Dr. Raditsa Aleksovska

Dr. Raditsa Aleksovska was born on 27.03.1982 in Macedonia. Graduated from Medical University - Varna in 2006. In 2018, acquired the specialty "General Medicine". Worked intermittently from 2007 to 2017 in specialized general medicine practices. Leads classes in academic disciplines in the Department of Anatomy, Histology and Embryology. Teaches students General Medicine english language education IV year and intern-doctors VI year, english and bulgarian language education.

Her research interests are in the field of common diseases in pre-hospital clinical practice, with the largest share of publications in the field of urinary tract infections (UTIs), vaccinations, connective tissue diseases, as well as hypertension in general clinical practice. There are 10 publications, such as on the topic of doctoral studies - there are 4 publications. She speaks Bulgarian and English language.

Dr. Raditsa Aleksovska is a family doctor, with good practical skills and experience, sense of responsibility and responsiveness, logical thinking. In 2017, founded a primary care clinic. The care in the practice is aimed at the whole family, with the main goal of covering all patients with preventive examinations, children's consultations, follow-up of chronically ill children. In 2021, she successfully completed training in ultrasound diagnostics for General Practitioners.

The dissertation work of Dr. Raditsa Aleksovska is on the topic: "Clinical presentation and prevention of the risk of developing urinary tract infections in childhood".

The dissertation is properly structured, starting with an introduction on the incidence and significance of urine infections in childhood. The topic was chosen due to the not always clear course of infections and the lack of the typical clinical picture of the course, especially in infancy and early childhood, as well as errors in urine collection and interpretation of results. There is no developed strategy for behavior in case of suspected UTI.

The purpose of the dissertation work is correctly formulated and is related to the study of the peculiarities of the clinical picture and course of U|TIs, as well as the need to differentiate the factors that make it difficult to make a timely diagnosis, with a view to improving the possibilities of risk prevention for their development in childhood. Seven tasks have been created, and the seventh task, which is extremely important for clinical practice, is related to the development of an algorithm for the behavior of UTIs in childhood to help GPs.

The material covers 126 parents, 27 GPs from Varna, Burgas and Dobrich regions and a retrospective analysis of medical documentation of 110 patients. The design of the current study was Cross-sectional, combining a retrospective analysis of medical notes (discharge letters) and prospectively realized through two questionnaire surveys. The dissertation work was approved by KENY of MU-Varna.

Conducted:

- surveys for parents (including 28 questions) who filled out the survey card independently during a planned child consultation at the GP or at home;

- studies "GPs and UTI in childhood". The role of children's consultation and its possibility to be used as a tool to reduce the risk of UTIs is reported;

- discharge letters - retrospective analysis of medical documentation of 110 patients, taking into account the following indicators: age, sex, height, weight, anamnestic data on frequent morbidity; fever, abdominal pain, nausea and vomiting, changes in urine (odor), constipation, frequent urination, involuntary leakage of urine, family burden, feeding in infancy, immunizations, urine cultures, status data, accompanying diseases, paraclinical indicators, incl. blood count, urea, creatinine, peak. urine, protein, sediment.

Documentary method, sociological method and statistical methods were used.

Results: The sample included 110 patients with a mean age of 7.32 +/- 5.1 and height 117 cm +/- 32.5, with 56.4% being female. The family burden was reported - in 45.5%. Leading symptoms according to anamnestic data are fever, abdominal pain, nausea, vomiting, changes in urine. From the laboratory indicators, leukocyturia, bacteriuria and high values for inflammatory activity were found in a large percentage of the examined children. A descriptive analysis of GP respondents was carried out. Of extreme importance is the prevention carried out in children with UTIs, as well as the awareness of patients regarding the need for preventive examinations. Parents are given advice on how to track changes in urine. Attention is also focused on the most common risks for the development of UTIs, the leading symptoms of UTIs, as well as the behavior of GPs when UTI is suspected. To prevent the chronicity of UTIs, recommendations are given for early diagnosis, as well as good parental awareness and prevention of UTI complications, which are related to hygiene, diaper removal and healthy eating.

The discussion of the dissertation is related to the emphasis on the frequency of UTIs, the non-specific course in childhood, as well as the difficulties in collecting sterile urine.

Attention has been paid to ultrasonography (US) as a valuable method in the diagnosis of UTIs. It is mentioned that already since 2013, a prophylactic ultrasound has been carried out in order to identify and search for anomalies of the excretory system. It is too late to perform an ultrasound to demonstrate changes in the kidney parenchyma (cicatrix). US is necessary for timely diagnosis of the infection and establishment of some of the most common predisposing factors of UTIs.

In conclusion: The dissertation examines one of the most common pathologies of the excretory system in childhood - UTI, the main symptoms, methods of diagnosis, as well as the therapeutic approach. The role of good collaboration between parent and general practitioner is emphasized.

14 conclusions were drawn. Conclusion 13, which indicates knowledge of risk factors by GPs and parental awareness as essential to prevent or reduce childhood UTIs, is extremely valuable. The work contains 4 original scientific and applied contributions, as well as contributions of a confirmatory nature. Important for clinical practice is the developed behavior algorithm for UTI in childhood in pre-hospital care. Action rules have been developed in the form of a brochure and poster of an educational nature, with the help of which the GP will inform parents about UTIs in childhood.

In clinical practice, an aid was written "Dialogue between a parent and a doctor for healthy kidneys" and it is dedicated to one of the doyens in Pediatrics, Assoc. Dr. Emil Dyankov. The collaboration of GPs with doctors from hospital care, the development of behavior algorithms, their compliance not only by clinicians, but also by parents will lead to a decrease in the frequency of UTIs, as well as a decrease in chronic kidney disease.

I propose to the respected scientific jury to award the educational and scientific degree "doctor" to Dr. Raditsa Aleksovska.

11.01.2023

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Prof. Dr. D. Bliznakova, dm