MODERN APPROACH TO THE TREATMENT OF ENURESIS IN CHILDREN

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ABSTRACT

Nocturnal enuresis is a violation of urination control, which is expressed by the involuntary urination of a child during sleep. This disease occurs in 2.3-30% of children aged 4-15 and is observed in every 3-4 children, which emphasizes the relevance of this condition. Today, nocturnal enuresis is widespread among children and not only harms the health of the child, but is also considered one of the social obstacles for the child to take his place in a healthy society, along with mental disorders in the child.

Keywords: children, nocturnal enuresis, diagnosis, treatment, transcranial magnetic stimulation.

In the ancient Egyptian papyri of the XV century, the symptoms associated with urinary incontinence at night, nocturnal enuresis (from the Greek "enureo" - to urinate) are described. In modern literature, nocturnal enuresis or urinary incontinence is established only from the age of 5, when the function of the bladder is controlled, having reached the age standard (1, 3). And precisely, the violation of urinary incontinence control, in childhood, reflects the interest of many specialists: pediatricians, psychiatrists, neurologists, nephrologists, etc. Statistical data on the frequency of occurrence are diverse, according to social living conditions, age categories, gender differences. So, the ratio of boys and girls is considered to be 3:2 (2, 6). A great achievement among the scientific world, the results of a study in 2018, by the GWAS association, testifying that bedwetting is hereditary, where it is proved by the analysis of specific genes, the risk of enuresis increases more than 11 times if parents had this problem (5, 7). This study was an important step towards understanding the biological the process of the disease, untreated children, retain the percentage of the prevalence of the disease in adolescence and older age, thereby increasing psychological disorders, the social barrier of a healthy society (3, 4). Unequivocally, it is difficult to say that the process of psychosocial restriction affects the frequency of enuresis in

children, many authors are of the opinion that a low standard of living is a risk of developing the disease (2, 7). An urgent and important factor in children with nocturnal enuresis is the need for early access to a doctor to obtain the necessary diagnosis of the cause of the disease and optimization treatment no later than 4-5 years of age; and at an earlier date, it is necessary to use measures to prevent nocturnal enuresis.

The purpose of the study. To study the features of clinical manifestations of nocturnal enuresis in children with further optimization of treatment tactics. Materials and methods of research. The examination was subject to children receiving inpatient treatment in the Department of Pediatric neurology of the multidisciplinary clinic of SamSMU (Samarkand).

Based on the exclusion criteria, children from 5 to 10 years old with enuresis 38 were selected for the period 2020-2022. The study did not include patients with organic diseases of the urinary system; the average age of children varied within 7 ± 2 years, boys 26, girls 12. The initial stage in the study was the anamnesis of the parents, to clarify the existing hereditary predisposition. In the study, it was mandatory to determine the biochemistry of blood, urine analysis (to exclude the inflammatory process). Instrumental research methods included ultrasound examination of the kidneys, bladder; digital radiography of the lumbosacral region was carried out, as well as the above-mentioned studies for all children without exception. Psychoneurological testing in children in accordance with the age contingent was performed before and after treatment according to the Spielberg-Khanin scales, modified for childhood, to obtain information about the state of the level of anxiety and depression against the background of the disease. Statistical processing was carried out on a personal computer, using variational statistics, using stationary calculation criteria. Research result. In accordance with the inclusion criteria, 38 children were selected for a period of 2 years (2020-2022), with bedwetting - enuresis. Urination during night sleep was observed in 18% every day, 1-2 times a week in 54% of children, in other cases 2-3 times a month in 28% of cases. The scoring of the assessment of the level of urination disorder according to the Vishnevsky formula (2, 6) showed in the examined children, bedwetting (M) on average 3, (m) on average 1.5; bladder volume in (ml) (m) 1.7, (m) 1.25, where confidence is 0.600; According to the anamnesis, there were cases of this disease in one of the parents, which averaged 10% of those examined. In addition, in 25.5% of cases, children examined with enuresis were found to have a history of threatened miscarriage, 3 children were born prematurely with low birth weight. A joint examination with

specialists in the Department of Pediatric Neurology revealed the characteristics of the dynamic factor of children, the number of daily urination above the norm corresponded to 32%, and the number of urination per day decreased from the norm on average 12.6%. Indicators of ultrasound examination are necessary as one of the methods of standard diagnosis, determining the regulation of renal pressure tone and for differentiating organic changes, anomalies of the urinary system. Only one patient had a duplication of the renal pelvis, and yet, in one patient, the mobility of the kidney on one side was more increased compared to the norm. The use of digital radiography makes it possible, in smaller doses of X-ray exposure and saving time with improved images, to conduct a diagnostic examination for all pediatric patients. Of the total number of children, the most important in the study, only 15.3% were found to have spina bifida (lumbosacral, spinabifida) as a congenital defect in the development of the spinal spine. At the same time, no damage to the nerves and spinal cord was found, and there were no obvious signs and symptoms affecting bedwetting. This is consistent with the literature, where this finding is taken as a finding, but, in some studies (1, 3, 7), the authors argue that this defect affects the treatment of patients with urinary incontinence at night, and may contribute to the prognostic factor in the treatment of enuresis. In the examined children, spinabifida at the level of S1-S2 was found in 5%, in other cases, no fusion of the arches at the level of L1-L2. In accordance with the objectives of this study, studied the characteristics of the psychological state of children. Mostly in children with prolonged manifestations, passing to school age. Gavrilina A.A. at one time (2001) describes personality changes in the character of children with enuresis. According to our study, it was found that in children over 6-7 years old, there are signs of a neurotic disorder in the form of anxiety, emotional lability, in 85% of cases; low self-esteem in 40% of cases; there are fewer aggressive children, but it occurs in 17% of cases. A vivid example is the description of a 7-year-old girl, in whose family a second child appeared, naturally in need of more attention, the girl becomes unmanageable, fights at school, and after school she refuses to go home, there were several cases of daytime encopresis. A high level of anxiety, in children included in the survey, noted more than 22%; which once again confirms the nervousness in children with impaired urination at night.

Thus, in the examined children, complaints from parents about bedwetting, neurological examination does not give focal changes, except for the relative flattened (kephosis) of the lumbosacral region, a relatively pronounced hairiness of this area. Organic disorders of the urinary system were not detected by laboratory and instrumental studies.

There is an increased level of personal anxiety, aggressiveness, isolation in protracted cases of enuresis in older children. The next step in the work provides for the optimization of treatment tactics. The children were divided into groups, the first group received drug treatment in the form of desmopressin, (intronosally) 1-2 drops (up to 20 mcg) in 1-2 doses per day; duration of action of the drug for more than 8 hours; the main effect, leads to a decrease in the volume of urination, affecting the central genesis. In the same group, sessions of magnetotherapy were carried out on the region of the cervical-collar zone, and the level of the lumbosacral region (replacing each other). Group I included children in the amount of 26, and an older age group with a more protracted course. The second group (II) received only drug treatment, the drug desmopressinitronasally. Re-application for examination to study the dynamics of the treatment was carried out after 3 months. An important point to improve the effectiveness of therapy, all parents received an information sheet indicating certain rules (not interrupting treatment, achieving at least 10 “dry” nights, using the “alarm clock” method; accustoming the child to get up at night to empty the bladder hourly; a ban on fluid intake at bedtime and throughout the night; use a diary to monitor wet nights). In special cases, children with severe anxiety were recommended to take the antidepressant amitriptyline (over 7 years old), taking into account the low percentage of such children, it was decided not to allocate them to a certain group, to leave them in group I.

The result of the analysis of treatment in group I of children with enuresis who received combined therapy (medication and physiotherapy), without an antidepressant - 16 children. The confidence score has decreased.

The manifestation of enuresis in three months decreased by 81%. The volume of the bladder increased by an average of 30%. After the treatment, one child had episodes of urinary incontinence, and one patient did not notice the effectiveness of the treatment, the patient was referred for additional diagnostic stages to exclude violations of urodynamic parameters. In the same group, 10 children, in addition to dismopressin, magnetotherapy (10 sessions in the cervico-collar zone, a month break, 10 sessions in the lumbosacral region), additionally received amitriptyline (an antidepressant). For a period of 3 months, the effectiveness of therapy proved to be high; the manifestation of enuresis was practically not observed, the children became calmer, more self-confident, there was a motivation to comply with all the rules for observing the drinking regimen, the “alarm clock” regimen. In group II, the number of children was 12, who received only drug monotherapy. After treatment, after 3 months, the follow-up showed that the reliability decreased, urinary incontinence remained unchanged in 3

children. Bladder volume increased by 28.7%; relief (for complete recovery) was noted in 2 children, the decrease in episodes of nocturnal urinary incontinence was insignificant. 3 children with enuresis, as well as the patient of the 1st group, who had enuresis, needed an additional examination of urodynamic parameters. Children with slight improvement were referred for physiotherapy treatment (according to the scheme used in group I).

Thus, the result of the treatment of children with nocturnal urinary incontinence - enuresis, of inorganic origin showed that in children of the first group there is a clear decrease in episodes of nocturnal urination, the volume of the bladder significantly increased ($p = 0.05$). Accordingly, one can see the effectiveness of combined drug and physiotherapy treatment, where magnetotherapy affects the normalization of urodynamics. Older children from the same group with signs of anxiety, having additionally received antidepressants (received in combination therapy), noted a complete recovery, despite the protracted course of the disease; which indicates the need to take into account the factor of the psychological state, correction at the stage of treatment, in order to increase the effectiveness of complex therapy.

REFERENCES

1. Nesterenko O. V., Goremykin V. I. Comprehensive approach to the treatment of primary monosymptomatic nocturnal enuresis in children // Medical scientific and practical portal https://www.lvrach.ru/2013/09/15435809

2. Pankratov S. Enuresis in children: causes and treatment // https://medportal.ru/enc/pediatrics/reading/bed-wetting/

3. Gaibiev A.A., Djurabekova A.T., Isanova Sh.T. Clinical and laboratory changes in diabetic neuropathy in adolescents / International scientific research journalISSN: 2776-0979, Volume 3, Issue 4, April., 2022

4. Dubina S.P., Evtushenko O.S., Evtushenko S.K. Diagnosis and therapy of enuresis in children (Scientific review and personal observations) // International Journal of Neurology 6 (60) 2013,

5. Zakharova I.N. Mumladze E.B. Pshenichnikova I.I. Enuresis in pediatric practice // MEDICAL COUNCIL • No. 1, 2017, p. 172-179

6. Isanova Sh.T., Djurabekova A.T., Abdullaeva N.N., Mukhtarova M.A. Sustained attention in children with obesity. "NEUROLOGY"—4(84), 2020.147 str.www.med.uz www.tipme.uz

7. Kuznetsova A.A. NOCTURNAL ENURESIS IN CHILDREN // Nephrology. 2012. Volume 16. No. 3 (No. 2), p. 16-24

8. Radjabov S., Djurabekova A.T., Isanova Sh.T. Determination of early diagnosis and neurological signs in patients with systemic lupus erythematosus. // Galaxy international, interdisciplinary research journal. Vol. 10. No. 9(2022): GIIRJ
9. StudenikinV. M. The problem of nocturnal enuresis in children: literature review (2012–2013) // Medical scientific and practical portal https://www.lvrach.ru/2013/05/15435705
10. Yusupov A.M., Djurabekova A.T., Utaganova G.H., Savronov J.S. Risk factors, clinical and neurological parameters and optimization of treatment in children with enuresis // American Journal of Medicine and Medical Sciences 2022, 12(3): p. 258-261