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PROBLEMS OF COMPREHENSIVE TREATMENT OF CONGENITAL DEFECTS WITH URINARY INCONTINENCE IN CHILDREN.

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Abstract:

Today, 11.3% of newborns are born with various deviations from the norm of development, and more than 40% of them are caused by insufficiency and anomalies of the organs of the genitourinary system (Yu.F. Isakov, 1984; 1997; 2004: G.A. Bairov 1999; 2001 and etc.). Among them, deviations from the norm complicated by urinary incontinence account for 8.0%. Complex treatment of developmental defects caused by urinary incontinence in children has long attracted the attention of practicing surgeons. and today it is one of the most pressing problems of pediatric surgery (N.E. Savchenko, ed. 1976: A.E. Rusakov 1998; Yu. Beknazarov 2004, etc.).

Keywords: Congenital defect, epispadias, diastasis, urinary incontinence.

INTRODUCTION:

Urinary incontinence is a syndrome of involuntary, uncontrolled urination, urinary incontinence, mainly during sleep. It is more common in children of preschool and early school age with a history of concomitant neurological pathology. It causes psychological trauma in the child, conflicts with peers in the team, punishment by parents in the family, neuroses, which further aggravates the course of enuresis. Often occurs together with other urological diseases (cystitis, pyelonephritis).

Classification:

The following forms of urinary incontinence are distinguished:

- Depending on the presence or absence of a "dry" period in the past without involuntary urination:

Persistent (primary) enuresis. Primary enuresis is called bedwetting in a child over 5 years of age if there has been no history of at least one "dry" period lasting more than 6 months.

Recurrent (secondary) enuresis is a condition in which a child begins to wet the bed after a dry period lasting from several months to several years. In cases of recurrent enuresis, there is often a connection between involuntary urination and urological, endocrinological, neurological or mental diseases.

Depending on the time of involuntary urination:

There are nocturnal, daytime and mixed enuresis. Nocturnal enuresis is observed in 85%, daytime enuresis in 5% and mixed enuresis in 10% of children suffering from involuntary urination. Nocturnal enuresis often develops in children who sleep very soundly (profundosomnia). Daytime and mixed enuresis may indicate that the child is experiencing neurological or emotional problems.

- Depending on the presence or absence of concomitant pathology:

Enuresis is considered uncomplicated when it develops in the absence of signs of infection or pathological changes in the genitourinary system. If a urinary tract infection, anatomical and functional changes in the urinary tract or pathological neurological conditions are detected, complicated enuresis is diagnosed. The accepted terminology does not reflect the causes and consequences of pathological conditions. In this case, the above conditions should be considered rather as a cause of urinary incontinence, and not as complications of enuresis.

A number of researchers distinguish between neurotic and neurosis-like enuresis. Neurotic enuresis usually develops in fearful, shy patients and is accompanied by difficult experiences for the child. Children suffering from neurosis-like enuresis, unlike the previous group, are indifferent to their condition until adolescence.

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The following causes of enuresis are distinguished:
Delayed development of cerebral urination centers
Impaired ADH secretion
Urinary tract infections and urological diseases
Hereditary predisposition
Stress and adverse psychological factors
Sleep disorders
From birth to 6 months, the child has an "immature type of urination." The reflex arcs of the bladder close at the level of the spinal and midcord, and urination occurs reflexively as urine accumulates (up to 20 times a day). From 6 months, the child begins to feel the filling of the bladder and tries to "signal" to others about the need to empty it (the child becomes concentrated, begins to push, sometimes cry, and calms down after urinating). Therefore, the doctor to whom the parents turned with such "complaints" must reassure the parents and explain that at this stage the baby is developing cortical control over urination. But to exclude various diseases of the urinary tract, the child must undergo an ultrasound examination and a general urine test. From this time on, it is advisable for parents to begin teaching their child "toilet" skills. After a year, the conditioned reflex becomes even more active, the child develops central inhibition of urination and the capacity of the bladder increases.
Completion of the formation of bladder function ("mature type of urination") occurs by 3-4 years and is characterized by a number of indicators:
compliance of bladder volume with age standards (fluctuations in urine volume during the day from 60 to 160 ml);
the number of urinations per day adequate to diuresis and bladder volume (7-9 times);
complete urinary retention day and night;
the ability to delay urination for a while and interrupt urination if necessary;
the ability to empty the bladder without a previous urge when its volume is small due to the volitional regulation of the act of urination;
certain behavior that accompanies the act of urination (privacy, hygiene, etc.). If a full bladder can wake a child, then cortical control over urinary function has been formed [12]. Considering age, urinary incontinence, as the most striking manifestation of urination disorder, is usually considered a pathology in children over 5 years of age. At this age, regular urinary incontinence requires examination and treatment by various specialists [3, 5, 10, 16]. Neurogenic bladder dysfunctions. Normal function of the lower urinary tract consists of two phases - the urine storage phase and the voiding phase - and is determined by the complex interaction between the bladder, sphincter apparatus, urethra and all levels of the nervous system. Violations of these relationships can occur both in the accumulation phase and in the excretion phase. All these disorders are called "neurogenic bladder" - this is a collective concept that unites a large group of disorders of the reservoir and evacuation functions of the bladder, which develop as a result of damage to the nervous system at various levels, and is characterized by changes in the uroepithelium or damage to the smooth muscle structure of the bladder. The muscles of the bladder (detrusor) can have normal function and pathological: or hyperactive, which occurs only during the filling phase and is manifested by involuntary contractions of the detrusor, not suppressed by volitional effort; or hypoactive, which occurs during the elimination phase and is manifested by a decrease or absence of contractile activity of the bladder, which leads to disruption of its emptying. The most extreme violations of the storage and evacuation function of the bladder are various forms of urinary incontinence. Currently, the most acceptable for use in pediatric urology is the classification of urinary incontinence proposed by Professor E.L. Vishnevsky (2001) [3]. Urinary incontinence: imperative (motor and sensory); stressful (with tension); reflex; from overflow: small volume (up to 150 ml), medium volume (150-300 ml), large volume (more than 300 ml);
combined. The most common type of urinary disorder in children is overactive bladder (OAB), a condition characterized by urgency, which may be accompanied by urge incontinence, frequent urination (>8 voids/day) and nocturia (≤1(2) voids/night) . According to various authors, about 50-100 million people suffer from OAB symptoms worldwide. The prevalence in Russia is 38%, among children - every fifth child has imperative forms of urinary disorders. The incidence rate is 17.8%. The reasons for the development of bladder overactivity are reflected in its classification:
neurogenic hyperactivity (the old term is detrusor hyperreflexia), the presence of neurological pathology;

Purpose: Our scientific research was an analysis of the results of complex treatment of patients with total and subtotal epispadias, complicated by total and partial urinary incontinence.

MATERIALS AND RESEARCH METHODS:
Our study was conducted from 1995 to 2005 at the Republican Children's Scientific and Practical Center for Minimally Invasive Endovisual Surgery at the Tashkent

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Medical Academy. Our scientific study was based on the results of treatment of 34 patients with total and subtotal epispadias.

It is known that total and subtotal types of epispadias are the most severe types of deficiency, accounting for more than 75%. In such patients, the length of the penis is 2-2.5 times shorter than normal, the tip is curled, and there is a natural inability to urinate on the face. Therefore, in patients in this group, urinary incontinence is first eliminated, but only after that they undergo urethroplasty. To eliminate urinary incontinence in children, we used sphincteroplasty surgery proposed by Derzhavin. The technique of this operation is as follows: a carabial incision is made and the symphysis is opened, the joint cavity is carefully separated from the surrounding tissues, the joint cavity is narrowed and sutured over a catheter.

The disadvantage of this operation is that in this case an attempt is made to form a sphincter only in the area of the articular cavity; with significant diastasis of the symphysis, the two symphyses are sutured closer to each other.

Due to these shortcomings in the immediate results of our operations performed on 34 patients, complete urinary retention was achieved only in 19 cases (55.8%), and partial - in 6 cases (17.6%). Also in our study, good clinical results were obtained in 88.3% of cases (N.E. Savchenko, V.M. Derzhavin 1976). 2 months after the operation, repeated radiography was performed in 16 of 34 patients (47.0%). It was noted that the diastasis of the symphysis was opened, as before the operation.

6 months after sphincteroplasty, Beknazarov Zh. and A. The operation "One-stage orthoneourethroplasty" was performed at the suggestion of Z. Fakirov (author's certificate No. 249), which, although it made it possible to straighten the penis and create a urethra in one stage, did not affect the improvement of urinary retention.

CONCLUSIONS:

Thus, we obtained the following results

1. Sphincteroplasty by V. M. Derzhavin, despite its relatively low-traumatic and physiological nature, gives conical results in 26.5% of cases.
2. The negative results of this operation are mainly associated with the imperfection of the technique of cross-stitching the symphysis, and in 47.0% of patients with cross-stitching of the symphysis within 2 months after the operation, the diastasis returns to its previous state. This condition is due to the tightening of the sutures.
3. Although one-stage orthoneourethroplasty surgery can straighten the penis and create a urethra in one step, it does not eliminate urinary incontinence.
4. Based on the above, it is recommended to improve the technique of articular approximation of the symphysis.

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