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ANAL FISSURE IN CHILDREN – A PEDIATRIC OR SURGICAL PROBLEM?

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An anal fissure is the commonest disease of the anal canal in children, and their suffering and poor quality of life determine the feasibility of the present study.

Objective is to determine the main causes of anal fissure development in children as a joint paediatric and surgical problem, for their adequate treatment in order to improve the quality of life.

Material and methods. The study included 64 children with anal fissures who were observed at the Kyiv City Children's Clinical Hospital No. 1; 39 (60.9%) boys and 25 (39.1%) girls. All children underwent a complete clinical, laboratory and instrumental examination.

Results of the study. There were 7 (10.9%) children under 3 years old, 27 (42.2%) – from 3 to 6 years, 16 (25.0%) – from 7 to 10 years, 9 (14.1%) – from 11 to 14 years, and 5 (7.8%) – from 15 to 18 years old. The course of the disease in 26 (40.6%) patients within 2 to 3 months led to constipation. Localization of the anal fissure (fissure in the posterior anodermis at 6⁰⁰ position in 55 (85.9±4.4)% patients, and combined fissures at 6⁰⁰ and 12⁰⁰ position in 9 (14.1±4.4)% children. In all patients, the fissure occurred at the background of constipation. The treatment was complex: elimination of sphincter spasm and hypertonia of the internal anal sphincter, and administration of lactulose-containing medications. Individualised treatment methods had a good result in 100% of cases, and there were no indications for surgical anal fissure excision.

Conclusions. The main thing in the treatment of the anal fissure is its prevention. Delayed bowel movements lead to constipation and anal fissure. The examination should be comprehensive, and the treatment should include relief of spasm and pain during bowel movements, normalisation of bowel movements using lactulose-containing drugs and diet correction, which is aimed at preventing both constipation and anal fissure.

Key words: anal fissure, children, diagnosis, conservative treatment.

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АНАЛЬНА ТРІЩИНА У ДІТЕЙ – ПРОБЛЕМА ПЕДІАТРИЧНА ЧИ ХІРУРГІЧНА?

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Анальна тріщина є найпоширенішим захворюванням анального каналу в дітей, а їхні страждання та незадовільна якість життя визначають доцільність дослідження. Метою роботи було визначення причини розвитку анальної тріщини у дітей для адекватного її лікування з метою покращення якості життя. В дослідження включено 64 хворих дитини з анальною тріщиною. Хлопчиків було 39 (60,9%), дівчаток – 25 (39,1%). Найчастіше хворіли діти до 6 років (34; 53,1%), після 7 років анальна тріщина була у 30 (46,9%) пацієнтів. Локалізація розриву у задній анодермі встановлена на 6⁰⁰ у 55 (85,9±4,4)% хворих, а поєднання тріщин на 6⁰⁰ та 12⁰⁰ тільки у 9 (14,1 ± 4,4)% дітей. Комплексне лікування у 100% забезпечило гарний результат, показань до хірургічного висічення анальної тріщини не було. Лікування було комплексним, включало зняття спазму та болів під час дефекації, нормалізацію спорожнень з використанням препаратів і корекцією харчування.

Ключові слова: анальна тріщина, діти, діагностика, лікування консервативне.

Relevance. An anal fissure (AF) is a linear or elliptical tear in the posterior part of the anodermis, extending cranially up to the dentate line, and due to proctogenic pain during bowel movements. It is the most common disease of the anal canal in children, which determines the relevance of the problem [1–3].

There is no exact frequency of the disease in the pediatric population. According to studies, the incidence of an anal fissure in children associated with constipation was 27.1% according to G. Doğan et al. (2022), and with constipation at the background of food allergy in 77.8% according to N.D.N. Sissoko et al. (2023), with bleeding from the lower intestine in 14.2% according to Y.B. Kim et al. (2022), and in 15.1% according to I. Malik et al. (2023), and 37.5% according to G. Eslamian et al. (2024), and 5.0% in newborns according to M Lin et al. (2022), as well as in more than 80% of patients with dysfunction of the

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puborectal muscle and the external anal sphincter according to M.T. Sanchez-Avila et al. (2018) [4–10]. It should be underlined that according to Medline data all the works have only a descriptive character in the treatment experience of the disease with no protocol data.

Typical clinical manifestations of AP are painful bowel movements and fear of the next defecation in children, especially at an early age, as well as rectal bleeding of various degrees, which still frightens children.

Rectophobia, a persistent fear before, during and after bowel movements leads to children's fear of defecation and, as a result, the development of psychogenic constipation, which further worsens the child's general condition and quality of life [1; 2; 11].

According to A.E. Joda et al. (2017), over the past decades, understanding of AP pathophysiology has led to reduction in invasive (surgical) procedures in favour of conservative treatment [12]. Meanwhile, some scientists believe that a chronic anal fissure still requires surgical treatment, but there is a risk of developing fecal incontinence after surgery [13].

Over the past 5 years, according to Medline, two works of B. Klin et al. (2016) and A.E. Joda et al. (2017) have presented the results of various methods of the conservative treatment of anal fissures in children without focusing on the cause of the latter [12; 14].

In the national literature, only one work of V.S. Kono-plitskyi (2015) is devoted to an acute anal fissure in children [1]. So, unsatisfactory quality of life of children suffering from the anal fissure determines the feasibility of this study.

The aim of the study is to determine the main causes of anal fissure development in children as a joint pediatric and surgical problem, for their adequate treatment in order to improve the quality of life.

Material and methods. The study included 64 children with anal fissure who were observed at the Kyiv City Children's Clinical Hospital No. 1. There were 39 boys (60.9%) and 25 girls (39.1%). All children underwent clinical, laboratory and instrumental examination, such as general blood and urine tests, perianal examination, coprological examination with culture for pathogenic flora, fungi and worm infestation. All patients had endoscopic examination: anoscopy in 42 (65.6±5.9%) and rectoromanoscopy in 24 (37.5±6.1%). The finger rectal examination was performed in 30 (46.9±6.2%) patients. Abdominal ultrasound was performed in 64 (100%) patients and the anorectal area in 37 (57.8±6.2%) patients, electrocardiography (ECG) – in 49 (76.6±5.3%) patients, echocardiography (EchoCG) – in 43 (67.2±5.9%) patients. Plain radiograph of the abdomen was performed in 35 (54.7±6.2%) patients. Irigography was performed in 17 (26.6±5.5%) patients. The localization of the fissures according to Gabriel was determined on the dial (lying on the back).

The data for statistical analysis were normally distributed according to the quantile-quantile normality plot. Mean values (M) and standard error (SE) were used to describe quantitative data, which are presented as M±SE. Frequency data are presented as percentages with the corresponding confidence intervals (95% CI). The χ^2 test for qualitative data was used to assess the significance of differences between groups. In cases where the sample size

was small ($n < 20$), Fisher's exact test was used. The degree of correlation of variables was determined by Pearson. Data were processed using IBM SPSS® software (version 26.0). The level of statistical significance was taken as $p < 0.05$.

The studies were performed in accordance with the principles of the Declaration of Helsinki. The study (protocol No. 9 of 03.09.2020) was approved by the Local Ethics Committee (LEC) of all the institutions mentioned in the work. Informed consent was obtained from the children's parents (or their guardians).

Results of the study. This study revealed no connection between the development of the disease and the patient's sex, according to the analysis of the χ^2 criterion and Fisher's exact criterion. First of all, we paid attention to the mental and emotional state of children suffering from the anal fissure. So, 29 (45.3±6.2%) patients of early age, from 3 to 8 years, had extremely difficulty in making contact, and when focusing on proctogenic pain, they refused to talk about the purpose of the visit. It is important to note that 26 (40.6±6.1%) patients were treated for a long time (3 to 5 weeks), without adequate results. Meanwhile, the studies revealed that children under 3 years of age were 7 (10.9±3.9%), from 3 to 6 years – 27 (42.2±6.2%) patients, from 7 to 10 years – 16 (25.0±5.4%) patients, from 11 to 14 years – 9 (14.1±4.4%) patients, and from 15 to 18 years – 5 (7.8±3.4%) patients. Examination of the bowel movements revealed blood impurities in 27 (42.2±6.2%) patients, mucus – in 13 (20.3±5.0%) and combined mucous-blood voiding – in 9 (14.1±4.4%) patients, and without visible pathological impurities – in 15 (23.4±5.3%) patients. It was also found that a bloody streak was visible – in 21 (32.8±5.9%) patients, and the stools mixed with blood and mucus – in 19 (29.7±5.7%) patients.

The following anal fissure localization (a tear in the posterior anoderm extending cranially to the dentate line) was established: at 6⁰⁰ position – in 55 (85.9±4.4%) patients, and combined localizations at 6⁰⁰ and 12⁰⁰ – in 9 (14.1±4.4%) patients (Fig. 1). The depth of the anal fissure depended to some extent on the presence of one or two fissures. So, in the presence of one fissure, the depth was greater than 2 mm, and in the presence of two fissures, the depth ranged from 1 mm to 2 mm. The length of the anal fissure correlated with the number ($r=0.78$).

The results of the abdominal wall examination showed a moderate abdominal bloating in 14 (21.9±5.2%) patients, and more pronounced above the womb in 23 (35.9±6.0%) patients. In contrast, 27 (42.2±6.2%) patients did not have bloating. Palpation revealed filling of the distal parts of the colon (rectum and sigmoid) with hard feces in 49 (76.6±6.2%) patients and soft-elastic contents – in 15 (23.4±5.3%) patients. At the same time, 16 (25.0±5.4%) patients had a physiological bowel movement after a thorough palpation of the lower abdomen.

The disease course in 26 (40.6±6.1%) patients within 2–3 months led to constipation. In the beginning, this group of patients had bowel movements every other day, then every 2–3 days, and after 2 months, one bowel movement every 4–5 days. Against the background of fear of bowel movements, 19 (29.7±5.7%) patients had fecal staining, of whom 15 (23.4±5.3%) patients defecated into a diaper, hiding in the corners of the room. Plain radiograph of the

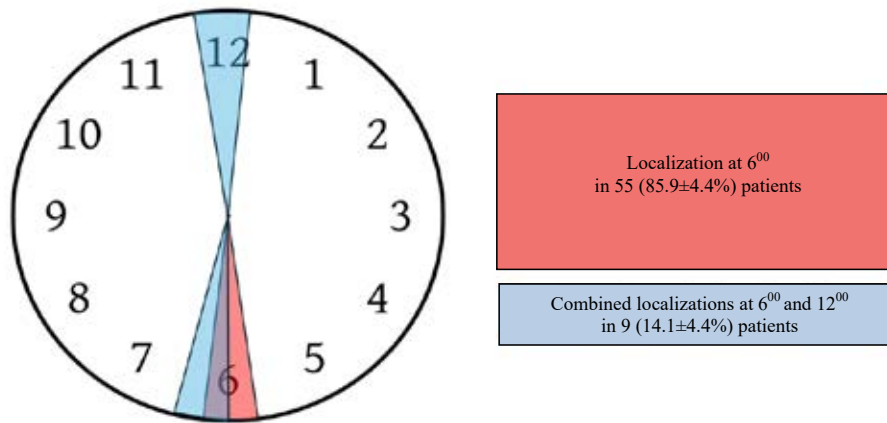


Fig 1. Localization of anal fissures in the examined children on the Gabriel dial

abdomen was performed in 35 (54.7±6.2)% patients and irrigography was performed in 17 (26.6±5.5)% patients. The plain radiograph of the abdomen in 35 (54.7±6.2)% patients showed distended loops of the small and large intestine and fecal calculi in the sigmoid and rectum. Irrigography data in 17 (26.6±5.5)% patients confirmed the presence of rectal dilation (a secondary megarectum) and a reduced shape of the sigmoid mucosa, as well as incomplete bowel movements immediately after the examination. In contrast, in 26 (40.6±6.1)% patients who suffered from the disease for up to 3 months, the edges of the anal fissure were covered with fibrin with chronic inflammation. It should be noted that this group of patients was racked by proctogenic pain both at the stages of examination and irrigography and at the beginning of treatment.

When analysing the anamnesis, the most probable causes of AP were inflammation of the anal canal mucosa in 9 (14.2±4.4)% children, proctitis in 6 (9.4±3.6)% patients, papillitis in 3 (4.7±2.6)% patients, non-specific enterocolitis in 8 (12.5±4.1)% patients, worm infestation (pinworms and roundworms) in 7 (10.9±3.9)% patients, colonic fixation disorder (Payr's syndrome) in 4 (6.3±3.0)%. So, in 37 (57.8±6.2)% patients the fissure occurred in the course of treatment due to the fact that the stools became hard and traumatised the mucosa up to the anal opening.

Finger rectal examination in 30 (46.9±6.2)% children (performed after going to the toilet) revealed a moderate induration of tissue around the fissure in 14 (21.9±5.2)% patients, while in the rest 16 (25.0±5.4)% patients the tissues were normal, without induration. On the other hand, all 30 (46.9±6.2)% patients had a full rectum with fecal (hard) stones, without the urge to defecate and the examination was performed after going to the toilet.

According to the results of the endoscopic examination, which was performed in 100% of patients, including anoscopy in 42 (65.6±5.9)% and rectoromanoscopy in 24 (37.5±6.1)% patients, moderate inflammatory changes were found, namely edema of the anal mucosa in 13 (20.3±5.0)% and rectum in 9 (14.1±4.4)% children, which required correction during treatment. It is worth noting that in 24 (37.5±6.1)% patients, rectoromanoscopy was performed twice, first after toilet visits, but due to the rectum being filled with feces, and again after preparation and cleansing of the rectum.

Abdominal ultrasound was performed in 64 (100)% patients and included the diameter and state of fecal mass filling of the rectum, as well as the thickness of the anterior wall of the rectum and concomitant malformations, which were identified in 4 (6.3±3.0)% patients, such as additional spleens. Ultrasound revealed (on an empty bladder – after a toilet) that the diameter of the rectum (from the bladder neck) was increased (compared to the norm) in all patients, including 1.5 times – in 13 (20.3±5.0)% patients, two times – in 37 (58.1±6.2)% and more than two times – in 14 (21.9±5.2)%. It was found that the thickness of the anterior wall of the rectum was also increased (thickened) due to edema as a result of prolonged coprostanis. Ultrasonography of the anorectal area was performed in 37 (57.8±6.2)% patients, of whom 14 (21.9±5.2)% had induration of the soft tissue, indicating a prolonged course of the disease.

The following comorbidities were identified during the comprehensive examination: additional chorda in the left ventricular cavity in 3 (4.7±2.6)% patients, mitral valve prolapse in 2 (3.1±2.2)% patients, additional spleens up to 0.5 cm in 4 (6.3±3.0)% patients, undifferentiated connective tissue dysplasia in 6 (9.4±3.6)% patients, inguinal hernias in 2 (3.1±2.2)% patients, flat feet in 3 (4.7±2.6)% patients, and Payr's syndrome in 4 (6.3±3.0)%. It was found that 15 (23.4±5.5)% patients suffered from bowel movement disorders from birth and were treated with a diet aimed at improving bowel movements.

The treatment was comprehensive for all patients and consisted of the following components: first of all, it was the elimination of sphincter spasm and hypertonia of the internal anal sphincter – to relieve pain and spasm, which affects the results of treatment, and is achieved by local anesthesia (rectal suppositories). The next step was to eliminate worm infestation (pinworms and roundworms) and treat the inflammatory process (inflammation of the anal canal mucosa, proctitis, nonspecific colitis) against the background of drugs that soften the stool (lactulose-containing drugs) to a mushy appearance. During the treatment, it is necessary to achieve daily painless bowel movements.

In 14 (21.9)% patients, of whom 9 (14.1±4.4)% children were of school age (11–14 years old) and 5 (7.8±3.4)% were of high school age (15–18 years old), the causes of defecation disorders (hard stools) and the anal fissure were of nutritional origin.

Thus, the essence of pathogenetic treatment was to relieve sphincter spasm, and as a result, minimise and eliminate proctogenic pain and fear of next bowel movements, and develop the skill of not being afraid of the potty (which is developing in this group of young children), not only during treatment, but also prognostic in preventing the recurrence of anal fissure in the future. Sphincter spasm relief was achieved by applying anaesthetic suppositories 30–50 minutes before the child's expected defecation time. The administration of lactulose-containing medications began with the dose indicated in the instruction, and later, in the absence of effect, was increased by 0.2–0.5 ml, depending on age, to the effective dose, which was prescribed for a month. The next step was to prescribe antifoaming agents, as it was clear that after taking lactulose-containing medications, bloating occurred, which further worsened the general condition of patients. For young patients, a bowel movements diary was introduced for bowel movements monitoring, and later transition to bowel movements before attending kindergarten or school, to minimise fecal staining, which still occurs in this group of patients.

An individualised approach to treatment allowed us to achieve good results – all patients recovered. No recurrences of the anal fissure were detected during 3 years. The quality of life of children was assessed as good.

Discussion. Starting the discussion, it is advisable to focus on the statement of the English doctor, proctologist Roy Bennett, who said that “Anal fissure is not a serious disease, but it causes considerable suffering. Treating it brings people real joy”. And he was absolutely right, because anal fissures are often accompanied by a number of unpleasant complaints: pain during bowel movements, sphincter spasm, and bloody discharge from the anus. In addition, anus fissures often lead to constipation, as severe pain makes children hold defecations [1; 15].

A thorough analysis of the literature revealed differences in the definition of the anal fissure itself. For example, B. Jahanny and J.V. Ashurst (2022) indicate that it is a superficial skin tear [16]. But J.A. Villanueva Herrero (2024) indicated that the tear extends to the fibres of the internal sphincter, which further increases the pain during bowel movements [17]. Our clinical results of diagnosis and treatment of the anal fissure in 64 patients did not confirm the spread of the fissure in depth up to the anal sphincter muscles.

Many theories have been put forward in medical and scientific publications to explain the origin of anal fissures, but according to D.L. Tran et al. (2023) and V.F. Rybalchenko et al. (2023), trauma by (hard) feces and internal sphincter hypertonia are obviously the most important factors. The primary lesion of the anal fissure is a tear of the anodermis, mainly in its posterior midline, caused by overstretching of the anal canal by hard (lumpy) feces. In the absence of adequate treatment and as the fissure becomes deeper and chronic (more than 6 weeks), sclerotic fibres of the internal anal sphincter are visible, as well as the sentinel node and the hypertrophied anal papilla. The disease is a part of the vicious cycle of anal pain, constipation, fecal trauma, and sphincter spasm [2: 15].

Visualisation of the anal fissure is essential not only for diagnosis, but also for monitoring its adequate treatment.

However, the (negative) reaction of young patients to the examination is not a secret, and it is hardly ever reported in medical publications. In our study, during the examination of the perianal area and anus in 26 (40.6±6.1)% patients, the following reactions of the child were identified: negativism, stubbornness, waywardness, willfulness, protest-rebellion, devaluation, and desire for despotism. They were first identified and described by Elsa Köhler (1926) in her work “On the Personality of a Three-Year-Old Child” [18]. Therefore, the problem of contact between a sick child and a doctor always arises, and this especially concerns examination and palpation of the perineum. R. Jamshidi (2018) draws attention to the careful examination of infants and children with an anal fissure, which usually requires deep sedation or general anesthesia [19]. In our study, all patients were examined without the use of sedation or anesthesia.

The classification of the anal fissure is presented in the following works. For example, B. Jahanny, J.V. Ashurst (2022) distinguished acute (less than 6 weeks) and chronic (more than 6 weeks) anal fissures. In the same publication, primary and secondary anal fissures were identified, and it was also indicated that the fissure along the posterior midline is usually primary and associated with constipation [16]. In our study, taking into account the duration of the disease, all patients had an acute anal fissure, and the origin was primary, as the main cause was constipation and traumatic damage to the skin and mucosa by hard (lumpy) feces. Meanwhile, according to J.A. Villanueva Herrero et al. (2022), the incidence of a chronic anal fissure is up to 40%, but this is not reported whether it occurs in children or adults [17].

Regarding the localization of the anal fissure, researchers J.A. Villanueva Herrero et al. (2022) and R. Jamshidi (2018) found that most of anal fissures (up to 90%) are located along the posterior midline [17; 19]. In our study, anal fissures were located in the posterior midline in (85.9±4.4)% patients, and (14.1±4.4)% patients had a combination of 6⁰⁰ and 12⁰⁰ positions.

Regarding the diagnosis and visualisation of both anal fissures and complications and concomitant pathology, D.L. Tran et al. (2022) proved that it was possible to palpate fecal stones and fecal conglomerates during the abdominal examination, which were observed in 37–91% of patients. Plain radiography of the abdomen can detect constipation (fecal conglomerates – stones) with a sensitivity and specificity of 60%–80% [15]. According to the results of our study, 35 (54.7±6.2)% patients had fecal stones in the sigmoid and rectum. Palpation of the lower abdomen in 49 (76.6±5.3)% patients revealed filling of the distal parts of the colon (the rectum and sigmoid) with hard stools.

Abdominal ultrasound is of great importance. Thus, D.L. Tran et al. (2022) and G. Doğan et al. (2022) performed rectal measurements after urination in 3 different areas: pubic symphysis, under the ischial ridge and in the bladder neck and found that the size of the pubic symphysis, ischial ridge and bladder neck in children with fecal retention was significantly higher (more than twice as much) than in children without fecal retention, and also found that the thickness of the anterior rectal wall in patients with constipation was significantly greater than in patients in the control group without constipation [9; 15].

Our examination of the rectum size showed that the diameter was increased in all patients, including 1.5 times – in 13 (20.3±5.0)% patients, twice – in 37 (58.1±6.2)% and more than twice in 14 (21.9±5.2)% patients.

Concomitant diseases and developmental abnormalities in children with the anal fissure have not been described in the literature. Our study revealed the following: undifferentiated connective tissue dysplasia took place in 6 (9.4±3.6)% patients, inguinal hernias – in 2 (3.1±2.2)% patients, flat feet – in 3 (4.7±2.6)% patients, and Payr's syndrome – in 4 (6.3±3.0)% patients. It was found that 15 (23.4±5.3)% patients suffered from bowel movements disorders from birth (Payr's syndrome – in 4 (6.3±3.0)% patients, dolichocolon – in 11 (17.2±4.7)% patients and were treated with a diet aimed at improving bowel movements. Probably, most specialists focus on the treatment of the anal fissure without going into further examination [11].

The causes of anal fissures in children are multifaceted. However, constipation is the main factor that ultimately leads to anal fissures. Despite the fact that constipation is the most common and accounts for 5 to 30% of the child population, examination and treatment is mostly carried out in the presence of complications: anal fissures, hemorrhoids or papillitis [2; 4; 20]. Our research showed that all the 64 patients had constipation. But at the initial stage, the parents did not pay attention to this (bowel movements once every 3–4 days was considered normal), and when the anal fissure appeared, they visited the doctor. The trouble is that this group of patients (those with constipation) should be examined and treated by a pediatrician, and timely correction would not have led to the anal fissure.

The treatment of an acute anal fissure in children usually begins with conservative measures, which in most cases has a positive result [1; 2; 17]. In children, according to J.A. Villanueva Herrero et al. (2022), anal fissures usually resolve on their own without surgical intervention with adequate treatment, while in adults, surgical treatment may be required. The scientific publications of J.A. Villanueva Herrero et al. (2024) and A.E. Joda et al. (2017) present a conservative method of the anal fissure treatment using nitroglycerine ointment [12, 17]. But the frequency of nitroglycerine ointment usage in a pediatric cohort was not indicated, as well as contraindications and age. But B. Klin et al. (2024) presented the experience of conservative treatment of 106 children with an acute anal fissure by using externally the nifedipine gel with lidocaine with good results [14].

According to M.J. Utzig (2003), the treatment of chronic anal fissures, which are associated with persistent hypertension and spasm of the internal anal sphincter, is surgical sphincterotomy in order to reduce the anal tone and eliminate sphincter spasm. The author has presented his thoughts on the incidence of fecal incontinence after surgery, which deters some surgeons from surgical treatment of this disease [13].

Summing up, it is advisable to note that the anal fissure caused by constipation should be considered primarily as a pediatric problem, or more as a problem of trust of the child's parents to the pediatrician or family doctor. It is clear that the anal fissure is a consequence of an unbalanced diet, which led to a delayed bowel movements and eventually constipation. Our research has shown that over time, prolonged constipations lead to the development of a secondary megarectum, and as a result (prolonged presence of feces in the rectum) it leads to a decrease in the urge reflex and the feeling of a complete bowel movement. Constipation always needs to be relieved, and therefore it is natural that the passage of hard lumps through the anal canal leads to a fissure in some children. The formation of a fissure depends on several components: the size of stools (how hard it is and whether it can be squeezed), the lumen (age-related) of the anal canal and the tone of the sphincter apparatus. Of course, this discrepancy leads to an acute anal fissure. The contact of feces with the fissure itself causes pain and heartburn, which further leads to the sphincter spasm, and as a result, delayed emptying and accumulation of feces – constipation. Of course, only a pediatrician should pay attention to the factors that can lead to constipation when examining a child and giving diet recommendations. If constipations are present, they need to be treated and their causes established. The anal fissure is the result of a delayed diagnosis of the bowel movement disorder causes, which led to constipation and sometimes to fecal staining, which is reported by parents.

Pathogenetic individualised methods of verification of the disease – the anal fissure and individualised methods of conservative treatment had usually good results, and in our observation, it was 100%. There were no indications for anal fissure excision and suturing.

Conclusions. The main thing in the treatment of the anal fissure is to prevent its occurrence, which depends to a greater extent on the vigilance and knowledge of the problem by a pediatrician, family doctor and parents of patients. Delayed bowel movements without finding out the cause ultimately lead to constipation, and eventually to lumpy stools, which will inevitably lead to the anal fissure, megarectum and a possible encopresis. The diagnosis of the anal fissure is based on visualisation of the anal and perianal areas, endoscopic and finger rectal examination. The treatment should be comprehensive and include the use of medications that eliminate sphincter spasm, proctogenic pain and a sense of fear of next defecation. Correction of defecations and treatment of constipation should be adequate not only with lactulose-containing drugs, but also with long-term diet correction, which is aimed at preventing recurrence of the consequences of functional defecation disorders. An important point is the treatment of concomitant pathologies: proctosigmoiditis, colitis, worm infestation.

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