кардани сифати ҳаёти беморони гирифтори аденомиоз, ки усулҳои гуногуни табобат мегиранд

Мавод ва усулхои тахкикот. Дар Пажухишгохи тадкикоти илмии акушерй, гинекология ва перинатология мо 127 нафар занонро бо шаклхои гуногуни аденомиоз тасдик намудем. Баъди муоина хамаи занон вобаста ба усули табобат ба 4 гурух таксим карда шуданд.

Натичахо ва мухокимахои онхо. Барои хар як зан, корти муоина бо замимаи саволномаи «Профили саломатии беморони эндометриоз, ЕНР-5 + 6», ки дар муоинаи аввал, 6 ва 12 мох пас аз табобат пур карда шудааст, тахия карда шуд. Дар асоси натичахои тахлили вокуниши беморон фаркият дар таъсири усулхои гуногуни табобат ба сифати хаёти беморон мукаррар карда шуд. Хамин тарик, табобат бо вояи пасти шифохӣ (этинилэстрадиол +

хлормадинон) ва гистерэктомия барои аденомиоз дар байни гуруххо натичахои бехтаринро нишон дода, бехтаршавии бештарро дар аксари сохахои сифати зиндагии занон нишон доданд. Насб кардани Mirena низ самаранок буд, аммо дар мукоиса бо ду гурухи дигари табобат ба андозаи камтар.

**Хулоса**. Истифодаи саволномахои стандартй барои арзёбии сифати зиндагй воситаи мухими мониторинги самаранокии табобат ва такмил додани равишхо ба табобати аденомиоз мебошад. Интихоби тактикаи табобат аз синну соли зан, накшахои репродуктивй ва аломатхои клиникй вобаста аст. Муоличаро аз зухуроти аввалини клиникии беморй огоз кардан мухим аст ва табобат бояд дарозмуддат, самаранок ва бехатар бошад.

**Калимахои калидй**. Аденомиоз, сифати ҳаёт, Саволномаи профили саломатии эндометриоз-5.

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## ЛЕЧЕНИЕ НАРУЖНЫХ КИШЕЧНЫХ СВИЩЕЙ У ДЕТЕЙ

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Цель исследования. Изучить особенности хирургического лечения наружных свищей.

**Материал и методы исследования**. Под нашим наблюдением находились 16 детей в возрасте от 9 месяцев до 18 лет с наружными кишечными свищами. Среди причин, приведших к образованию свищей, первое место заняли абсцесс аппендикса и перитонит (12 пациентов).

Результаты исследования и их обсуждение. У большинства пациентов были выявлены лабиформные свищи тонкой кишки, тогда как трубчатые свищи чаще встречались в толстой кишке. Диагностика основывалась на характере кишечных выделений, что позволяло уточнить локализацию свища. Например, выделения из высоких тонкокишечных свищей содержали желчь, тогда как выделения из толстокишечных свищей чаще напоминали оформленный кал. У шести пациентов были одиночные свищи, тогда как у остальных наблюдалось от двух до пяти свищей, включая сочетания тонкокишечных и толстокишечных свищей. Множественные свищи сопровождались более сложными диагностическими и лечебными задачами. Хирургическое лечение в 9 случаях включало резекцию пораженного участка тонкой кишки с наложением анастомоза конец-в-конец. Все оперативные вмешательства осложнялись выраженными спаечными процессами в брюшной полости, что требовало от хирургов особой осторожности и тщательного планирования.

**Выводы**. Во всех случаях хирургическое вмешательство было осложнено выраженным спаечным процессом в брюшной полости.

**Ключевые слова:** наружные кишечные свищи, кишечная непроходимость, энтеростома, колостома, перитонит.

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### TREATMENT OF EXTERNAL INTESTINAL FISTULAS IN CHILDREN

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Aim. To study the features of surgical treatment of external fistulas.

Materials and methods. 16 children aged from 9 months to 18 years with external intestinal fistulas were observed in the current study. Among the causes that led to the formation of fistulas, an appendix abscess and peritonitis were the most common, occurring in 12 patients.

Results. In most patients, labiform fistulas were found in the small intestine, whereas tubular fistulas were more common in the colon. The diagnosis was based on the nature of the intestinal discharge, which helped to specify the location of the fistula. For example, discharges from small bowel fistulas contained bile, whereas those from large bowel fistulas more often resembled solid stool. Six patients had solitary fistulas, while the others had two to five fistulas, including combinations of small and large intestinal fistulas. Multiple fistulas were associated with more complex diagnostic and therapeutic challenges. In nine cases, surgical management included resection of the affected segment of small bowel with construction of an end-to-end anastomosis. All surgical procedures were complicated by significant adhesions in the peritoneal cavity, requiring special care and careful planning by the surgeon.

**Conclusions.** Surgical intervention was complicated in all cases by a pronounced adhesive process in the abdominal cavity.

Keywords: external intestinal fistulas, intestinal obstruction, enterostomy, colostomy, peritonitis.

Abstract. Spontaneous external intestinal fistulas in children are complications of acute diseases or trauma to the abdominal organs. The causes of such fistulas can be different (acute appendicitis, intussusception, intestinal obstruction, damage to internal organs as a result of abdominal trauma), but a common feature in the pathogenesis of intestinal fistulas is limited or widespread purulent peritonitis. External intestinal fistulas (EIFs) in children remain a significant challenge in pediatric surgery due to their complex etiology, high risk of complications, and the delicate physiological state of pediatric patients. These pathological connections between the intestinal lumen and the skin surface can arise from congenital abnormalities, surgical interventions, trauma, or infections. The management of EIFs requires a comprehensive understanding of their pathophysiology, meticulous surgical techniques, and an interdisciplinary approach to optimize outcomes and minimize morbidity.

The incidence of EIFs in pediatric patients, while lower than in adults, carries a unique set of challenges. Unlike adults, children are particularly vulnerable to nutritional deficiencies, fluid and electrolyte imbalances, and infections due to their limited physiological reserves. These complications, if not addressed promptly, can lead to severe consequences, including failure to thrive, sepsis, and even mortality. Thus, the treatment of EIFs in children demands careful planning and execution tailored to the specific needs of the pediatric population.

Advances in surgical techniques and postoperative care have significantly improved the prognosis for children with EIFs. The primary goals of treatment include the closure of the fistula, restoration of

intestinal continuity, and prevention of recurrence. Non-operative management, such as total parenteral nutrition (TPN) and wound care, plays a crucial role in stabilizing patients before definitive surgical intervention. However, the timing of surgery, the choice of surgical approach, and the management of associated complications remain topics of ongoing debate and research.

Recent studies emphasize the importance of a multidisciplinary team in managing EIFs. Pediatric surgeons, nutritionists, infectious disease specialists, and intensive care physicians collaborate to address the multifaceted aspects of this condition. Nutritional support, both enteral and parenteral, is a cornerstone of treatment, ensuring adequate caloric intake to promote healing and growth. Additionally, advances in imaging techniques have enhanced preoperative planning, enabling surgeons to accurately assess the location and extent of the fistula and its relation to surrounding structures.

Despite these advancements, challenges persist in the treatment of EIFs in children. High-output fistulas, for instance, pose a particular challenge due to their association with significant fluid and electrolyte losses. Additionally, the presence of underlying conditions such as necrotizing enterocolitis, inflammatory bowel disease, or postoperative adhesions can complicate treatment. Innovative solutions, such as the use of biologic dressings, tissue adhesives, and minimally invasive surgical techniques, are being explored to address these challenges and improve outcomes.

In conclusion, the treatment of external intestinal fistulas in children is a dynamic and evolving field. While significant progress has been made in

understanding the pathophysiology and management of EIFs, ongoing research and innovation are needed to further enhance treatment strategies. By prioritizing a multidisciplinary approach and leveraging advancements in technology and surgical techniques, the prognosis for children with EIFs can continue to improve, ensuring better quality of life and long-term health outcomes. The role of nutritional factors and immune status in children with intestinal fistulas deserves special attention. It is known that insufficient intake of nutrients due to loss of intestinal contents and increased body energy requirements leads to severe hypoproteinemia and micronutrient deficiency, which, in turn, exacerbates the course of the disease and reduces the effectiveness of treatment. This makes it important to implement nutrition correction protocols, including parenteral and enteral nutrition, taking into account the individual characteristics of patients.

In addition, improving the diagnosis of intestinal fistulas at an early stage remains an important priority. The use of modern imaging techniques such as magnetic resonance imaging, high-resolution ultrasound and contrast X-rays makes it possible to clarify the localization of fistulas, determine their relationship to surrounding structures and develop an individual treatment plan.

Progress in the field of regenerative medicine also opens up prospects in the treatment of intestinal fistulas. Tissue engineering and the use of biological materials to stimulate the healing of fistula passages can significantly reduce the duration of hospitalization and improve the quality of life of patients. However, these methods are still under development and require further clinical studies.

An important area remains the training of medical personnel in modern approaches to the treatment of this pathology. Simulation training, the use of virtual reality, and the implementation of evidence-based medical protocols can improve the quality of care, especially in specialized pediatric surgical centers.

Thus, the study of intestinal fistulas in children and the improvement of their treatment methods remain relevant. Solving this problem requires an interdisciplinary approach aimed at reducing complications, improving outcomes, and improving the quality of life of children with this complex pathology.

**Target.** Unlike artificial intestinal fistulas imposed by surgeons for therapeutic purposes (enterostomy, colostomy, unnatural anus), spontaneous fistulas aggravate the already serious condition of patients and often cause their death.

Materials and methods. We observed 16 children aged from 9 months to 18 years with external intestinal fistulas. Among the causes that led to the formation of fistulas, appendiceal abscess and peritonitis took first place (12 patients). In two children, multiple intestinal fistulas formed against the background of widespread purulent peritonitis, as a result of traumatic injury to the abdominal organs (in one case, a rupture of the small intestine was not detected, in the other, damage to the spleen was not diagnosed). One patient was operated on on the 5th day after the occurrence of small- and large-intestinal intussusception and widespread purulent peritonitis.

**Results.** Depending on the location, small intestinal and large intestinal external fistulas are distinguished, with the most severe in terms of clinical course being high small intestinal fistulas. Based on their anatomical structure, they distinguish between labiform and canaloid (tubular) fistulas. In addition, labiform fistulas can be complete, when the intestinal contents are completely released through the intestinal lumen onto the anterior abdominal wall, and incomplete, in which the intestinal contents partially enter the distal intestine. The number of external intestinal fistulas in one patient may vary, although according to domestic and foreign authors, single fistulas are most common. Of our group of patients, only 6 had one fistula. In the remaining patients, the number of fistulas ranged from 2 to 5, with the bulk of them being small intestinal labiform fistulas. Colonic tubular fistulas were present in three patients in combination with small intestinal fistulas. In no case did we encounter a small intestinal tubular fistula. Thus, labiform fistulas are most characteristic of the small intestine, and tubular fistulas are most characteristic of the large intestine. This sign has diagnostic value, since the anatomical structure of the fistula can be used to judge its location, which is important when performing surgery.

Diagnosis of external intestinal fistulas does not present great difficulties. Already by the nature of the intestinal discharge one can judge the location of the fistula. So, with high intestinal fistulas, the abundant intestinal discharge, as a rule, contains bile. When the fistula is localized in the middle part of the small intestine, the discharge is liquid, without admixture of bile, but without the characteristic fecal odor. Closer to the ileocecal angle, the intestinal contents acquire a thicker consistency and fecal odor. As a rule, formed feces are released from colonic fistulas. All these diagnostic techniques are of great importance for single fistulas, when the intestinal deformation is not so

pronounced. With multiple fistulas, especially if they are located at different levels, diagnostic errors are possible. Thus, in one of our observations, where there were 3 small intestinal labiform fistulas and two large intestinal tubular fistulas, characteristic small intestinal contents mixed with bile were released not only from the small intestinal fistula, but also from the large intestinal fistula in the left ileal region (projection of the sigmoid colon). During an additional examination (methylene blue test, fistulography, radiography of the colon with barium, radiography of the gastrointestinal tract), it was found that the patient had an internal fistula between the loop of the small intestine and the sigmoid colon. In the second case, in a patient with 4 small intestinal labiform fistulas, intestinal contents were released from three fistulas at different levels. Additional examination revealed that the patient had internal interloop fistulas. The bearing fistula turned out to be high and incomplete.

Treatment of patients with external intestinal fistulas presents significant difficulties. First of all, therapy should be carried out aimed at eliminating the inflammatory process in the abdominal cavity. For this purpose, we widely used drainage of purulent leaks. Residual manifestations of widespread peritonitis in the form of abdominal abscess of various locations were noted by us in 6 patients.

Small intestinal external fistulas, especially high ones, quite quickly lead patients to exhaustion due to the loss of large amounts of fluid, electrolytes and proteins. In this regard, therapy aimed at restoring water-electrolyte and protein metabolism is extremely important in the treatment of such patients. This was achieved by systematically administering blood, plasma, albumin, and saline solutions under the control of biochemical blood parameters. Diet therapy was selected individually depending on the severity of the patient's condition with the introduction of high-protein and high-fat foods into the diet. In order to increase the body's defenses, the use of long-acting anabolic hormones (retabolil) is indicated.

Simultaneously with general strengthening therapy, it is necessary to carry out careful care of the skin, since the secreted intestinal juice, especially with high intestinal fistulas, quite quickly causes maceration of the skin around the fistula. Macerated areas are very painful, bleed easily and cause suffering to the patient with each dressing change. In addition, severe maceration of the skin around the fistula is a relative contraindication to surgical intervention. To sanitize the skin surrounding the fistula, daily baths with potassium permanganate were prescribed, me-

chanical removal of intestinal contents was carried out repeatedly during the day, after which the skin was treated with zinc ointment, rosehip oil or sea buckthorn oil. In rare cases, we used tight pressure bandages and obturators or pelota. In our opinion, attempts to mechanically close the fistula are effective only for incomplete single fistulas. With complete external intestinal fistulas and, especially, with multiple ones, preference should be given to the open method of management.

In some cases, with incomplete tubular colonic fistulas, intensive conservative general and local therapy leads to closure of the fistula. However, labiform fistulas, both complete and incomplete, are not prone to self-healing and require surgical treatment. The difficulties in the surgical treatment of children with this pathology lie primarily in the fact that with the formation of external intestinal fistulas, a sharp disruption of the topographic-anatomical relationships of tissues and organs occurs. In most cases, even after a detailed examination of the patient, the surgeon must exercise maximum caution during surgery. In one of our observations, in a girl with a single complete fistula in the middle part of the small intestine, during surgery it was discovered that the stomach along the greater curvature was soldered to the loop carrying the fistula. This was established only when the fistula was isolated and, thus, complications were avoided.

Surgical correction of external intestinal fistulas should be strictly differentiated depending on the type of fistula, their location and quantity.

For single incomplete lip-shaped small and large intestinal fistulas, an extraperitoneal closure method can be recommended if the defect in the intestinal wall is no more than 1/3 of the diameter. We successfully used this method in 3 patients with small intestinal fistulas.

In 4 cases where there were single complete labiform small intestinal fistulas, intraperitoneal closure of these fistulas was performed with end-to-end anastomosis.

9 patients had from 2 to 4 external small intestinal fistulas, which were located close to each other. In all cases, he was able to perform resection of the affected area of the small intestine with end-to-end anastomosis.

Conclusions and recommendations. In conclusion, it should be noted that in all cases, surgical intervention was complicated by a pronounced adhesive process in the abdominal cavity.

The postoperative period in our patients was smooth, there were no relapses. When studying the

separate results, it was found that children develop normally and do not lag behind their peers in physical development. Some play sports, but 13 children periodically report abdominal pain.

Thus, the treatment of sick children with external intestinal fistulas that have arisen independently presents significant difficulties, both in terms of nursing such patients and during surgical intervention.

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#### ХУЛОСА

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## ТАБОБАТИ ФИСТУЛАИ БЕРУНИИ РЎДА ДАР КЎДАКОН

**Мақсади таҳқиқот.** Омӯхтани хусусиятҳои табобати царроҳии фистулаҳои берунй.

**Мавод ва усулхои тахкикот.** Мо 16 кудаки аз 9 моха то 18-соларо бо фистулахои берунии руда назорат мекардем. Дар байни сабабхои пайдоиши фистула, чои аввалро абсцесси аппендикс ва перитонит (12 бемор) ишгол карданд.

Натичаи тадкикот. Дар аксари беморон

фистулахои лабиформии рудаи борик ошкор карда шуданд, дар холе ки фистулахои қубурӣ бештар дар рудан ғафс пайдо мешуданд. Ташхис ба хусусияти хуручи руда асос ёфта, имкон медод, ки чойгиршавии фистуларо мушаххас кунад. Масалан, ихроч аз фистулахои баланди рудаи борик сафро дошт, дар холе ки ихроч аз фистулахои рудаи ғафс бештар ба начосати ороишефта шабохат дошт. Шаш бемор фистулахои яккаса доштанд, дар холе ки дигарон аз ду то панч фистула доштанд, аз чумла омезиши фистулахои рудаи борик ва рудаи ғафс буданд. Фистулахои сершумор бо вазифахои мураккаби ташхисй ва табобатй ниёз доштанд. Табобати царрохй дар 9 холат резексияи қисми зарардидаи рудаи борикро бо гузоштани нугбанди анастомоз ба охир расонда шудааст. Хамаи дахолатхои чаррохй бо равандхои пайвастшавии шадиди шикам мушкилтар шуданд, ки аз чаррохон эхтиеткории махсус ва банақшагирии дақиқро талаб мекард.

**Хулоса.** Дар хотима бояд қайд кард, ки дар ҳама ҳолатҳо ҷарроҳӣ бо раванди протсеси пайдошавии пайҳо дар шикам мураккаб шудааст.

**Калимахои калид**й: фистулахои берунии руда, монеаи руда, энтеростома, колостома, перитонит.

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# ОСОБЕННОСТИ ДОППЛЕРОМЕТРИИ У БЕРЕМЕННЫХ ЖЕНЩИН С ГИПЕРТЕНЗИВНЫМИ ОСЛОЖНЕНИЯМИ И СОЧЕТАННЫМ ДЕФИЦИТОМ МИКРОНУТРИЕНТОВ

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**Цель исследования.** Изучение параметров доплерометрии у беременных с гипертензивными состояниями и сочетанным дефицитом микронутриентов.

Материал и методы исследования. Для достижения поставленной цели нами обследовано 200 беременных женщин в третьем триместре беременности. Среди обследованных - 30 женщин с физиологической беременностью (контрольная группа), 70 женщин с йоддефицитными состояниями (1-я группа сравнения), 58 женщин с железодефицитной анемией (2-я группа сравнения), 42 женщин с сочетанием железодефицитной анемии, Мд, Са и йододефицитными состояниями (основная группа). Критериями включения во все группы явились репродуктивный возраст, ІІІ триместр беременности, в 1-ю группу сравнения — дефицит потребления йода на основании данных йодурии в суточной порции мочи I и II степени, во 2-ю группу сравнения — анемия легкой