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GASTROENTERITIS CAUSED BY CONDITIONALLY PATHOGENIC MICROFLORA IN YOUNG CHILDREN

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Abstract: About a billion episodes of diarrhea occur in young children every year. Symptoms accompanying acute gastroenteritis include malaise, abdominal pain and cramps, nausea, vomiting and diarrhea, which usually last from 1 to 5 days, but sometimes up to 14 days. Diarrhea caused by opportunistic microflora in children can be associated with various causes. Opportunistic pathogens are usually present in the human body, but under certain conditions they can become pathogenic and cause disease. Here are several possible causes of diarrhea in children associated with conditionally pathogenic microflora. In this case, an imbalance of microorganisms in the intestine occurs, when conditionally pathogenic bacteria begin to predominate over beneficial ones. This pathology is caused by the use of antibiotics, which can upset the balance of microorganisms in the intestine and contribute to the development of diarrhea.

Keywords: microbial cells, colonization, opportunistic, children.

The total biomass of microbial cells in the gastrointestinal tract (GIT) of an adult is on average 3–4 kg. The gastrointestinal tract is home to about 450 species of microorganisms, and the total number of cells reaches 1014, which exceeds the number of cells of the macroorganism.

The intestinal microflora is divided into protective, saprophytic and opportunistic. The protective microflora that forms the basis of the intestinal microflora is represented by anaerobes - bifidobacteria (108-1010) and lactobacilli (106-108), which form a protective biofilm on the surface of the mucous membrane, and aerobes - Escherichia coli (E. coli) with normal enzymatic properties (107-108). 108).

These microorganisms provide colonization resistance - the stability of normal microflora and the prevention of colonization of the host organism by foreign microorganisms. Saprophytic microflora is represented by epidermal and saprophytic staphylococcus, enterococci, yeast, neisseria and other microorganisms that, under certain conditions, can exhibit their pathogenic properties.

Methods: The nutrient medium for saprophytes are the end products of the macroorganism's vital activity. Conditionally pathogenic (opportunistic) microorganisms under normal conditions are

normal inhabitants of the human gastrointestinal tract, skin, and respiratory tract, but under certain conditions they can cause a pathological process. Currently, there is an increase in the number of diseases caused by opportunistic microorganisms.

This group of microorganisms includes β -hemolytic streptococcus, spore-bearing anaerobes, Staphylococcus aureus (S. aureus), fungi of the genus Candida, gram-negative enterobacteria (Proteus, Klebsiella, Escherichia coli with altered properties, etc.), Acinetobacter, Citrobacter. In some children, opportunistic microorganisms in an amount of no more than 102-103 can be normally detected in the stool. The composition of microflora in different parts of the intestine varies. In general, the largest number of different microorganisms is determined in the large intestine.

Results: In order to identify the causes of dyspeptic disorders in children, 668 bacteriological cultures of feces were analyzed for the period from May 1, 2022 to May 1, 2023 in the bacteriological laboratory of the Fergana Medical Institute of Public Health. Standard bacteriological examinations of stool were carried out to determine sensitivity to antibiotics using the diffusion-disk method.

Thus, more than 85% of those studied were children under 1 year of age. At the same time, Staphylococcus aureus (Staph.aureus 10-4 – 10-5) was found in 485 people studied, Staph. epidermidis, while many patients lacked normal intestinal microflora (E.coli), Klebsiella10-6 was found in 45 patients, in the remaining cases: Ps.vulgaris, St. pneumoniae, Candida.

The following antibacterial drugs turned out to be the most sensitive: gentamicin, levomak, polymyxin, ceftriaxone, and the least sensitive were oxamp and roxibel.

Based on the above, it should be noted that currently there is an increase in opportunistic intestinal flora.

Discussion: Unlike older children and adults, in whom dysbiosis is always secondary and its main causes are antibacterial therapy and chronic diseases of the gastrointestinal tract, in newborns and infants the development of dysbiosis can be primary and is caused by factors such as intestinal dysbiosis, bacterial vaginosis in pregnant and nursing mothers, late breastfeeding, early artificial or mixed feeding, perinatal pathology, species microbial landscape and the degree of environmental contamination.

References:

- 1. Imomova, M. E., Abduganiev, E. G., Khoshimova, A. E., & Turdiboev, A. Kh. (2014). DETERMINATION OF THE AMOUNT OF CHOLESTEROL IN FOOD PRODUCTS. In Current problems and achievements in medicine (pp. 51-52).
- 2. Hoshimova, A. E. (2018). INFLUENCE OF ENVIRONMENTAL POLLUTION ON THE

- INCIDENCE OF BRONCHIAL ASTHMA. Current issues of modern pulmonology. Ma, 200.
- 3. Рапиков, И. Г. (2019). Роль народных подходов к учащимся начальной школы на основе труда, экономики и предпринимательства. доктора/кандидата наук предлагаем вступить в редакционную коллегию журнала (подробности на сайте), 90.
- 4. Rapikov, I. (2020). SCHOLARS'VIEWS ON THE FORMATION OF SAVINGS AND ENTREPRENEURSHIP ON THE BASIS OF LABOR EDUCATION IN PRIMARY SCHOOL STUDENTS. Scientific and Technical Journal of Namangan Institute of Engineering and Technology, 2(11), 309-313.
- 5. Pulatova, Z., & Ganijonov, H. (2023, June). MODERN VIEWS OF BEHAVIORAL CHANGES IN 16-17-YEAR-OLD STUDENTS. In International Conference on Education and Social Science (Vol. 1, No. 2, pp. 30-32).
- 6. Jalolidinovna, I. Z. Cellular Changes in Cardiomyocytes Due to Ischemia and Necrosis. JournalNX, 7(04), 1-2.
- 7. Kulieva, E. M., & Abduganieva, A. E. THE ROLE OF THEORIES AND CONCEPTS OF EPIDEMIOLOGY IN THE PREVENTION OF INFECTIOUS DISEASES. COLLECTION, 97.
- 8. Abduganieva, A. Y. (2023). ETIOLOGICAL FACTOR OF ACUTE INTESTINAL INFECTIONS IN DIFFERENT AGE GROUPS. World Bulletin of Public Health, 29, 38-40.
- 9. Achilov, F. K., Khashimov, A. A., Abdukadirova, N. M., Bakaev, I. K., Tulaboeva, G. M., & Sh, T. Y. (2022). SOME PATHOPHYSIOLOGICAL FEATURES OF THE COURSE OF COVID-19 IN ELDERLY PERSONS AND OLD AGE. British Medical Journal, 2(1).
- 10. Achilov, F. K., Khashimov, A. A., Tulaboeva, G. M., & Sh, T. Y. (2022). ASPECTS OF CARDIOVASCULAR PATHOLOGY IN ELDERLY AND SENILE AGE. Art of Medicine. International Medical Scientific Journal, 2(1).
- Khashimov, A. A., Sh, T. Y., Tulaboeva, G. M., Abdukadirova, N. M., & Akhmadaliev, B. K. (2022). PROGNOSTICATING THE RISK OF FATAL COMPLICATIONS IN PATIENTS WHO UNDERWENT COVID-19. Art of Medicine. International Medical Scientific Journal, 2(1).
- 12. Botirovna, T. G. (2022). THE IMPORTANCE OF HIRUDOTHERAPY IN THE TREATMENT AND PREVENTION OF DISEASES. Scientific Impulse, 1(5), 888-891.
- 13. Tilyaxodjaeva, G. (2022). ISSUES OF PREVENTION OF ENT DISEASES WITH HIRUDO THERAPY TREATMENT. Science and Innovation, 1(8), 885-887.
- 14. Gulbakhor, T. (2022). ETIOPATHOGENETIC MECHANISMS OF VARICOSE VEINS. Universum: химия и биология, (5-3 (95)), 29-31.
- 15. Tilyaxodjaeva, G. (2022). ISSUES OF PREVENTION OF DISEASES OF ENT ORGANS

- WITH TREATMENT BY HIRUDOTHERAPY. Science and innovation, 1(D8), 885-887.
- 16. Tilyakhodzhaeva, G. B. (2022). TREATMENT OF MIGRAINE WITH HIRUDOTHERAPY. Scientific Impulse, 1(5), 892-896.
- 17. Tilyaxodjaeva, G. (2022). APPLICATION OF HIRUDOTHERAPY IN MEDICINE. Science and innovation, 1(D8), 1007-1010.
- 18. TILYAKHODJAEVA, G. (2022). BULLETIN OF SCIENCE AND PRACTICE. BULLETIN OF SCIENCE AND PRACTICE Учредители: Овечкина Елена Сергеевна, 8(6), 452-455.
- 19. Gulbahor, T. (2022). Hirudotherapy as a Method of Treatment of Arterial Hypertension. Бюллетень науки и практики, 8(6), 452-455.
- 20. Tilyakhodjaeva, G. B., & Fattakhov, N. K. (2021). Some aspects of hirudotherapy in treatment of varicose disease (literature review). ASIAN JOURNAL OF MULTIDIMENSIONAL RESEARCH, 10(5), 204-209.
- 21. Tilyakhodjaeva, G. B. (2019). PREVENTION OF CHRONIC OTITIS COMPLICATIONS. Internauka, (7-2), 73-74.
- 22. Болтабоева, Д. И. (2023). ОИВ ИНФИЦИРЛАНГАНЛАРДА ГЕРПЕТИК ИНФЕКЦИЯЛАРИНИ КЛИНИК КЕЧИШ ХУСУСИЯТЛАРИ. Scientific Impulse, 2(13), 174-177.
- 23. Азимов, М. Б., & Болтабоева, Д. И. (2021). ОСОБЕННОСТИ КЛИНИЧЕСКОГО ТЕЧЕНИЯ ГЕРПЕТИЧЕСКОЙ ИНФЕКЦИИ ВИЧ-ИНФИЦИРОВАНЫХ БОЛЬНЫХ. In Молодежь, наука, медицина (pp. 14-18).
- 24. Маматкулова, М. Т. (2017). Разработка методов и средств объективный оценки достижения целей обучения. Биология и интегративная медицина, (4), 228-235.
- 25. Mamatkulova, M. T. (2016). Study to efficiency voluntary inoculation under viral hepatitis A. Биология и интегративная медицина, (2), 88-93.
- 26. Маматкулова, М. Т. (2016). Definition of sensitivity of microorganisms to an antibiotic and prophylactics interhospital infectious. Биология и интегративная медицина, (2), 99-109.
- 27. Маматкулова, М. Т. (2017). Role bacteriocarrier at salmonelleze-the epidemiological analysis and system of antiepidemic actions. Биология и интегративная медицина, (4), 89-94.
- 28. Маматкулова, М. Т. (2018). Use of modern pedagogical technologies when training in the subject epidemiology and prevention of viral hepatitis a. Биология и интегративная медицина, (4), 232-241.
- 29. Mamatqulova, M., & Ruziboeva, Y. (2023). EPIDEMIOLOGICAL ASSESSMENT OF SALMONELLOSIS DISEASE IN FERGANA CITY AND THE SYSTEM OF ANTI-EPIDEMIC MEASURES. Евразийский журнал медицинских и естественных наук, 3(6),

- 61-64.
- 30. Хасанбоева, Н. А. (2021). ЦЕЛЕБНЫЕ СВОЙСТВА ПРЕПАРАТОВ, ПОЛУЧЕННЫЕ ИЗ ПРОДУКТА ХВОИ. Интернаука, 22, 7
- 31. Khasanboeva, N. A. (2023). MEDICINAL PLANTS OF THE FERGANA REGION. International Journal of Medical Sciences And Clinical Research, 3(02), 1-4.
- 32. Khasanboeva, N. A. (2023). Fees in Folk and Modern Medicine. The Peerian Journal, 14, 14-17.
- 33. Abdullajonovna, H. N. INTERACTION BETWEEN DRUG SUBSTANCES AND NUTRIENT PRODUCTS. International Journal of Advanced Research in ISSN, 2278-6252.
- 34. Xasanboeva, N., & Raximova, X. (2023). B12 VITAMINI YETISHMOVCHILIGI VA UNI DAVOLASHDA QO 'LLANILADIGAN DORI VOSITALARI. Евразийский журнал медицинских и естественных наук, 3(5), 267-273.