

CLINICAL FEATURES OF HYMENOLEPIASIS IN CHILDREN

**Matyakubova Oysha Urinovna,
Abdullayeva Dilfuza Kadamovna,
Artiqov Ikrom Axmedjonovich,
Ibodullayeva Sevvara Salibayevna**

Urgench branch Tashkent medical academy, Khorezm, Uzbekistan

Abstract: The widespread prevalence of infectious and parasitic diseases among humans and animals is facilitated by the intensive contamination of various environmental objects — such as soil, water, household items, vegetables, greens, fish, and meat products—with helminth eggs. Failure to observe personal hygiene rules and the lack of basic preventive measures, not only among people but also among animals, contribute to environmental contamination with parasite eggs and larvae. All of this leads to an increase in cases of parasitic infections not only among animals but also among people, particularly among children.

Keywords: Hymenolepiasis, infestation, children, environment, food, water.

КЛИНИЧЕСКИЕ ОСОБЕННОСТИ ГИМЕНОЛЕПИДОЗА У ДЕТЕЙ

Аннотация. Широкому распространению инфекционных и паразитарных заболеваний среди людей и животных способствует интенсивная контаминация различных объектов окружающей среды: почвы, воды, предметов быта, овощей, зелени, рыбных и мясных продуктов их возбудителями — яйцами гельминтов. Несоблюдение правил личной гигиены, отсутствие элементарных мер профилактики не только среди людей, но и среди животных, приводящее к загрязнению объектов окружающей среды яйцами и личинками паразитов, - все это приводит к росту случаев паразитарных заболеваний не только среди животных, но и среди людей, в том числе и среди большинства детей.

Ключевые слова: гименолепидоз, инвазия, дети, окружающая среда, продукты питания, вода.

Hymenolepis nana, known as the dwarf tapeworm, is one of the most widespread tapeworms that causes hymenolepiasis. These parasites consume vital nutrients, microelements, and vitamins necessary for human life, negatively impacting children's health. They release toxins that weaken the immune system. Hymenolepiasis is widespread across the globe, with humans serving as the primary source of infection. The disease affects people of all ages and genders, depending on specific and communal environmental conditions.

This contagious parasite is found in many countries and is the most common cause of cestodiasis in both tropical and temperate climate zones. Infection rates are particularly high among children. Although *Hymenolepis diminuta* can also cause hymenolepiasis, it is much less common. *Hymenolepis nana* is unique among cestodes in completing its full life cycle in a single host, without

needing an intermediate host. This parasite can complete its life cycle entirely within a human (auto-infection), a process that occurs in the intestines.

Infection usually occurs through ingesting eggs found in the feces of an infected person, often via contaminated food. Insects can sometimes act as carrier hosts. Morphological characteristics of parasite eggs in feces are crucial for diagnosis. The eggs accumulate in the stomach or small intestine, and the larvae (oncospheres) penetrate the microvilli of the upper intestine, attaching to the intestinal walls. The larvae develop into cysticercoids and return to the intestinal lumen to mature. Adult worms reach maturity within a few weeks and can grow up to 40 mm in length.

Hymenolepiasis may be asymptomatic even with a high parasite load. Some patients may experience headaches, dizziness, loss of appetite, abdominal pain, diarrhea, and irritability. Blood tests in some cases show eosinophilia. Severe infections can be caused by internal auto-infection, where the eggs mature and complete their life cycle within the intestines. This characteristic can lead to complications.

Among children with hymenolepiasis, the most commonly affected age groups are preschoolers and school-aged children (45% and 34%, respectively), while 20% are younger children. This suggests that the infection is more prevalent in children during periods of active interaction with the environment.

Common symptoms in children with hymenolepiasis include: constant fatigue and irritability (100%), headaches (92%), persistent facial rashes (78%), hair and nail loss (76%), decreased appetite (70%), and anemia (72%). Gastrointestinal symptoms such as persistent abdominal pain (77.8%), constipation, and diarrhea (55.5%) were also observed. Nervous system symptoms were present in 64.4% of children, including mood swings, irritability, fatigue, and weakness. Many children experienced disturbed sleep and bruxism (teeth grinding). In 35% of cases, children exhibited severe symptoms like dizziness, eye blinking, nose twitching, and shoulder jerking (tics). Additionally, 80% had poor concentration, 62.2% had weight loss, and 82.2% were diagnosed with anemia. In 42.2% of cases, physical developmental delays, memory problems, and learning difficulties were observed. Allergic reactions were found in 63.4% of children. Older children experienced more severe complications such as chronic pyelonephritis (in 45% of affected children), sinusitis (22%), and weakened immune systems. 38% had intestinal dysbiosis or prolonged diarrhea.

Diagnosis of helminth infections typically involves microscopic examination of stool samples. If hymenolepiasis is suspected in a child, fresh stool should be collected in a special container and sent to the lab on the same day. Detecting parasite eggs of *Hymenolepis nana* or *Hymenolepis diminuta* in feces is necessary for confirmation. Treatment includes praziquantel or niclosamide. Because cysticercoids are less sensitive during development, effective treatment may require higher doses or longer treatment durations.

Preventive measures are crucial in controlling hymenolepiasis: regular handwashing after using the toilet, coming indoors, and before meals is essential. Stool analysis is typically performed to differentiate gastrointestinal and parasitic infections. If a parasitic infection has been diagnosed before, the test can also be used to monitor the effectiveness of anthelmintic therapy.

In conclusion, children with hymenolepiasis exhibit a variety of clinical symptoms, including general toxic effects, gastrointestinal and neurological issues, and allergic reactions. The disease can be difficult to detect, especially in early stages, making early diagnosis and treatment crucial. Stool analysis should be repeated 14 days after treatment, then monthly for six months. If parasite eggs are still detected, another course of treatment is necessary.

References:

1. Ibrakhimova H.R, Matyakubova O.U, Sadullaev S.E., & Abdullayeva D.K. (2023). HELMINTISES IN CHILDREN AMONG THE POPULATION IN UZBEKISTAN. *IMRAS*, 6(7), 323–327. Retrieved from <https://journal.imras.org/index.php/sps/article/view/521>
2. Ibrakhimova, H. R., & Nurllayev, R. R. (2023). A METHOD FOR OBTAINING PRECIPITATING SERUMS FOR THE DETECTION OF HUMAN SEMINAL FLUID USED IN THE STUDY OF PHYSICAL EVIDENCE IN FORENSIC BIOLOGICAL LABORATORIES. *World Bulletin of Management and Law*, 19, 42-44.
3. Машарипова, Ш. С., Ибрахимова, Х. Р., Нурллаев, Р. Р., & Садуллаев, С. Э. (2023). ТЕЧЕНИЕ ВНУТРИБОЛЬНИЧНЫХ ПНЕВМОНИИ У БОЛЬНЫХ НАХОДЯЩИХСЯ НА ДЛИТЕЛЬНОМ АППАРАТЕ ИСКУССТВЕННОЙ ВЕНТИЛЯЦИИ ЛЁГКИХ. *Scientific Impulse*, 2(16), 1172-1178.
4. Ибрахимова Хамида Рустамовна, Нурллаев Руслон Рустамбекович, & Артиков Икром Ахмеджанович (2020). ВЫЯВЛЕНИЕ ТУБЕРКУЛЕЗА В ХОРЕЗМСКОЙ ОБЛАСТИ. *Наука и образование сегодня*, (6-1 (53)), 83-84. doi: 10.24411/2414-5718-2020-1060210602
5. Ибодуллаева Севара Салибаевна (2023). ЭПИДЕМИЧЕСКАЯ СИТУАЦИЯ ПО ТУБЕРКУЛЕЗУ В ПРИАРАЛЬСКОМ РЕГИОНЕ. *Проблемы современной науки и образования*, (8 (186)), 29-33.
6. Nurllayev, R. R., Ibadullayeva, S. S., & Yoqubov, Q. Y. (2023). KICHIK QON AYLANISH DOIRASI ARTERIYALARINING MORFOLOGIK TUZILISHI. *Научный Фокус*, 1(8), 463-468.
7. CHARACTERISTICS OF PATHOMORPHOLOGICAL CHANGES IN LYMPHOCYTIC LEUKOSIS IN CHILDREN. (2023). *Western European Journal of Medicine and Medical Science*, 1(4), 21-26. <https://westerneuropeanstudies.com/index.php/3/article/view/122>
8. Ibraximova, H. R., & Sadullayev, S. E. (2023). AHOLI ORASIDA O ‘TKIR ICHAK KASALLIKLARINING TARQALISHI. *Новости образования: исследование в XXI веке*, 2(15), 115-119.
9. Ибрахимова Хамида Рустамовна, Нурллаев Руслон Рустамбекович, & Артиков Икром Ахмеджанович (2019). Влияние паразитарных болезней на особенности развития туберкулеза у детей, проживающих в Хорезмской области. *Наука, техника и образование*, (9 (62)), 68-72.
10. Ibrakhimova, H. R., & Artikov, I. A. (2023). CHANGES IN THE IMMUNE STATUS OF PATIENTS WITH PARASITIC DISEASE. *Новости образования: исследование в XXI веке*, 2(15), 103-108.

THE MULTIDISCIPLINARY JOURNAL OF SCIENCE AND TECHNOLOGY

VOLUME-5, ISSUE-5

11. Masharipova Sh.S., Ibrakhimova H.R., Sadullaev S.E., & Nurllayev R.R. (2023). SPREAD OF MYOCARDIAL INFARCTION AMONG THE POPULATION OF THE KHOREZM REGION. *IMRAS*, 6(7), 328–332. Retrieved from <https://journal.imras.org/index.php/sps/article/view/523>
12. Ibrakhimova, H. R. (2023). THE PREVALENCE OF PARASITES IN THE CHILD POPULATION WITH THE DEVELOPMENT OF FUNCTIONAL PATHOLOGY OF ORGANS. *Finland International Scientific Journal of Education, Social Science & Humanities*, 11(4), 1-5.
13. Ibrakhimova H.R., ., & Oblokulov A.R., . (2020). Pathogenetic Bases And Prevalence Of Parasitic Infections In Children: Literature Review. *The American Journal of Medical Sciences and Pharmaceutical Research*, 2(10), 87–95. <https://doi.org/10.37547/TAJMSPR/Volume02Issue10-14>
14. Ибрахимова Хамида Рустамовна, Машарипова Шохиста Собировна, Матякубова Айша Уриновна, & Артиков Икром Ахмеджанович (2023). ИНФИЦИРОВАНИЕ БОЛЬНЫХ ТУБЕРКУЛЕЗОМ ОТ ЖИВОТНЫХ В НЕБЛАГОПОЛУЧНЫХ ПО ТУБЕРКУЛЕЗУ ХОЗЯЙСТВАХ. *Проблемы современной науки и образования*, (7 (185)), 48-53.
15. Машарипова, Ш. С., Ибрахимова, Х. Р., & Машарипов, С. М. (2023). Анализ эпидемиологических особенности диарейных заболеваний у детей южного приаралья. *O'ZBEKISTONDA FANLARARO INNOVATSIYALAR VA ILMIY TADQIQOTLAR JURNALI*, 2(15), 884-887.
16. RESULTS OF STUDIES ON THE LEVEL OF POPULATION KNOWLEDGE ABOUT PARASITIC DISEASES AND ITS PREVENTION. (2023). *Western European Journal of Medicine and Medical Science*, 1(4), 15-17. <https://westerneuropeanstudies.com/index.php/3/article/view/121>
13. Artikov, I. A., Sadullaev, S. E., Ibrakhimova, H. R., & Abdullayeva, D. K. (2023). *RELEVANCE OF VIRAL HEPATITIS EPIDEMIOLOGY*. *IMRAS*, 6 (7), 316–322.
18. Rustamovna, I. H. (2024). PATHOGENETIC PRINCIPLES OF ACUTE INFECTIOUS INTESTINAL INFECTIONS AND FEATURES OF CLINICAL COURSE AMONG CHILDREN OF DIFFERENT AGES. *Multidisciplinary Journal of Science and Technology*, 4(2), 357-365.
19. Ibrakhimova, H. R., & Sh, Y. S. (2023). Artikov IA PARAZITAR KASALLIKLAR NATIJASIDA INSON ORGANIZMIDA KUZATILADAIGAN ALLERGIK HOLATLAR. *Новости образования: исследование в XXI веке*, 2(15), 97-102.
20. Машарипова, Ш. С., Ибрахимова, Х. Р., & Машарипов, С. М. (2023). Анализ эпидемиологических особенности диарейных заболеваний у детей южного приаралья. *O'ZBEKISTONDA FANLARARO INNOVATSIYALAR VA ILMIY TADQIQOTLAR JURNALI*, 2(15), 884-887.
21. Oblokulov, A., Kholov, U., Oblokulova, Z., & Ibrakhimova, X. (2019). Clinical and laboratory characteristics of giardiasis in adults. *New day in medicine. Scientific and practical journal*, 1(1).
22. Хамида Рустамовна Ибрахимова (2022). ПАРАЗИТАР КАСАЛЛИКЛАР ТАШХИСЛАНГАН ТУРЛИ ЁШДАГИ ОДАМЛАРДА ИММУН СТАТУСИГА ТАВСИФ.

THE MULTIDISCIPLINARY JOURNAL OF SCIENCE AND TECHNOLOGY

VOLUME-5, ISSUE-5

Academic research in educational sciences, 3 (4), 812-819. doi: 10.24412/2181-1385-2022-4-812-819

23. Ибодуллаева Севара Салибаевна (2023). ЭПИДЕМИЧЕСКАЯ СИТУАЦИЯ ПО ТУБЕРКУЛЕЗУ В ПРИАРАЛЬСКОМ РЕГИОНЕ. Проблемы современной науки и образования, (8 (186)), 29-33.

24. Saliybayevna, I. S., Yodgor o'g'li, Y. Q., & Odilbekovna, R. D. (2025). NOSOCOMIAL PNEUMONIA AND ITS ETIOLOGICAL FACTORS. *Multidisciplinary Journal of Science and Technology*, 5(3), 225-230.

25. Saliybayevna, I. S., Yodgor o'g'li, Y. Q., & Odilbekovna, R. D. (2025). EPIDEMIOLOGY AND COMPLICATIONS OF COVID-19. *Multidisciplinary Journal of Science and Technology*, 5(3), 218-224.

26. Sadullayev, S. E., Matyakubova, O. U., Artikov, I. A., Nurllayev, R. R., Ibadullayeva, S. S., & Yakubov, K. Y. (2023). RESULTS OF STUDIES ON THE LEVEL OF POPULATION KNOWLEDGE ABOUT PARASITIC DISEASES AND ITS PREVENTION. *Western European Journal of Medicine and Medical Science*, 1(4), 15-20.

27. Ibadullayeva, S. S., Yakubov, K. Y., Artikov, I. A., Nurllayev, R. R., & Sadullayev, S. E. (2023). CHARACTERISTICS OF PATHOMORPHOLOGICAL CHANGES IN LYMPHOCYTIC LEUKOSIS IN CHILDREN. *Western European Journal of Medicine and Medical Science*, 1(4), 21-26.

28. Nurllayev, R. R., Ibadullayeva, S. S., & Yoqubov, Q. Y. (2023). KICHIK QON AYLANISH DOIRASI ARTERIYALARINING MORFOLOGIK TUZILISHI. *Научный Фокус*, 1(8), 463-468.

29. Salibaevna, I. S. (2022). MOBILE HEALTH OPPORTUNITIES IN TRAINING MEDICAL WORKERS. *Art of Medicine. International Medical Scientific Journal*, 2(1).

30. Ибадуллаева, С. С., Кенжаева, М. А., & Пулатов, Ш. К. (2017). СОВРЕМЕННЫЕ ЭПИДЕМИОЛОГИЧЕСКИЕ ОСОБЕННОСТИ БРЮШНОГО ТИФА В РЕСПУБЛИКЕ УЗБЕКИСТАН. In *Young scientists' and mentors' non-standart congress* (pp. 147-151).

31. ARTIQOV, I., & ABDULLAYEVA, D. (2025). CHICKENPOX: AMONG YOUNG CHILDREN IN KHOREZM REGION. *Multidisciplinary Journal of Science and Technology*, 5(3), 678-683..

32. ARTIQOV, I., & ABDULLAYEVA, D. (2025). THE SPREAD OF DIARRHEAL DISEASES IN THE KHOREZM REGION. *Multidisciplinary Journal of Science and Technology*, 5(3), 672-677..

33. Юсупов Шавкат Рахимбоевич, Абдуллаева Дилфуза Кадамовна, Машарипова Шохиста Сабириевна, & Матякубова Ойша Уриновна (2020). Применение пектина в комплексной терапии при острых кишечных инфекциях. *Вестник науки и образования*, (5-2 (83)), 51-56.

34. Юсупов, Ш. Р. (2020). Абдуллаева Дилфуза Кадамовна, Машарипова Шохиста Сабириевна, Матякубова Ойша Уриновна Применение пектина в комплексной терапии при острых кишечных инфекциях. *Вестник науки и образования*, (5-2), 83.

THE MULTIDISCIPLINARY JOURNAL OF SCIENCE AND TECHNOLOGY

VOLUME-5, ISSUE-5

35. Юсупов, Ш. Р. (2020). Абдуллаева Дилфуза Кадамовна, Машарипова Шохиста Сабировна, Матякубова Ойша Уриновна Применение пектина в комплексной терапии при острых кишечных инфекциях. *Вестник науки и образования*, (5-2), 83.
36. Машарипова Шохиста Сабировна, & Матякубова Ойша Уриновна (2020). Течение ВИЧ/СПИД инфекции у больных туберкулезом легких. *European science*, (3 (52)), 110-112. doi: 10.24411/2410-2865-2020-10302
37. Машарипова Шохиста Сабировна, & Матякубова Айша Уриновна (2020). Кумысолечение ослабленных детей в Хорезмском регионе. *Наука, образование и культура*, (2 (46)), 49-51. doi: 10.24411/2413-7111-2020-10201
38. Matyakubova, O. U. (2023). EPIDEMIOLOGICAL FEATURES OF CHICKENPOX AMONG CHILDREN IN THE KHAREZM REGION. *Finland International Scientific Journal of Education, Social Science & Humanities*, 11(4), 11-14.
39. Ibrakhimova, H. R., Matyakubova, O. U., Sadullaev, S. E., & Abdullayeva, D. K. (2023). *HELMINTISES IN CHILDREN AMONG THE POPULATION IN UZBEKISTAN. IMRAS*, 6 (7), 323–327.
40. Машарипова, Ш. С. (2020). Матякубова Айша Уриновна Кумысолечение ослабленных детей в Хорезмском регионе. *Наука, образование и культура*, 2, 46.
41. Masharipov, S. M., Matyakubova, O. U., & Yakubov, K. Y. (2025). IMMUNE STATUS IN PATIENTS WITH PARASITIC DISEASES IN KHOREZM REGION. *Multidisciplinary Journal of Science and Technology*, 5(1), 514-517.
42. Nurllayev R. R., Ibadullayeva S. S., Yoqubov Q. Y. KICHIK QON AYLANISH DOIRASI ARTERIYALARINING MORFOLOGIK TUZILISHI //Научный Фокус. – 2023. – Т. 1. – №. 8. – С. 463-468.
43. Ibadullayeva, S. S., Yakubov, K. Y., Artikov, I. A., Nurllayev, R. R., & Sadullayev, S. E. (2023). CHARACTERISTICS OF PATHOMORPHOLOGICAL CHANGES IN LYMPHOCYTIC LEUKOSIS IN CHILDREN. *Western European Journal of Medicine and Medical Science*, 1(4), 21-26.
44. Yusupov, S., Sadullayev, S., & Yoqubov, Q. (2025). GEPATITLAR FONIDA KORONAVIRUS INFEKSIYASINING KECHISHI. *Journal of Science-Innovative Research in Uzbekistan*, 3(3), 294–303. Retrieved from <https://inlibrary.uz/index.php/journal-science-innovative/article/view/76633>
45. Yusupov, S., Sadullayev, S., Yoqubov, Q., & Ibragimov, U. (2025). HOMILADOR AYOLLAR ORASIDAGI QIZILCHA: XUSUSIYATLARI, XAVFLARI VA OLDINI OLISH. *Journal of Science-Innovative Research in Uzbekistan*, 3(3), 286–293. Retrieved from <https://inlibrary.uz/index.php/journal-science-innovative/article/view/76634>
46. SH, Y. S., YOQUBOV, Q., & NURLLAYEV, R. (2025). FEATURES OF THE COURSE OF THE HERPES TYPE 4 VIRUS IN CHILDREN. *Multidisciplinary Journal of Science and Technology*, 5(3), 397-402.
47. NURLLAYEV, R., SH, Y. S., & YOQUBOV, Q. (2025). PECULIARITIES OF THE ETIOLOGICAL STRUCTURE OF ACUTE DIARRHEAL DISEASES IN THE CONDITIONS

THE MULTIDISCIPLINARY JOURNAL OF SCIENCE AND TECHNOLOGY

VOLUME-5, ISSUE-5

OF THE SOUTHERN ARAL REGION. *Multidisciplinary Journal of Science and Technology*, 5(3), 403-408.

48.Saliybayevna, I. S., Yodgor o'g'li, Y. Q., & Odilbekovna, R. D. (2025). EPIDEMIOLOGY AND COMPLICATIONS OF COVID-19. *Multidisciplinary Journal of Science and Technology*, 5(3), 218-224.

49.Saliybayevna, I. S., Yodgor o'g'li, Y. Q., & Odilbekovna, R. D. (2025). NOSOCOMIAL PNEUMONIA AND ITS ETIOLOGICAL FACTORS. *Multidisciplinary Journal of Science and Technology*, 5(3), 225-230.

50.Razzokberganova, D. O., Ibragimov, S. J., Yoqubov, Q. Y., & Atadjanova, O. N. (2025). NUTRITION IN VIRAL HEPATITIS. *Multidisciplinary Journal of Science and Technology*, 5(3), 59-62.

51.Ibragimov, S. J., Razzoqberganova, D. O., Yoqubov, Q. Y., & Atadjanova, O. N. (2025). EMERGENCIES IN INFECTIOUS DISEASES: EPIDEMIOLOGICAL, MEDICAL AND SOCIAL ASPECTS. *Multidisciplinary Journal of Science and Technology*, 5(3), 63-67.

52.Razzokberganova, D. O., Ibragimov, S. J., Bobojonov, Y. B., & Yoqubov, Q. Y. (2025). EPIDEMIOLOGICAL AND CLINICAL CHARACTERISTICS OF ENTEROBIASIS. *Multidisciplinary Journal of Science and Technology*, 5(2), 665-668.

53.Yoqubov, Q. Y., Bobojonov, Y. B., Razzokberganova, D. O., & Ibragimov, S. J. (2025). FEATURES OF THE COURSE AND SPREAD OF TENIARINCHOSIS DISEASE. *Multidisciplinary Journal of Science and Technology*, 5(2), 669-672.

54.Masharipov, S. M., Matyakubova, O. U., & Yakubov, K. Y. (2025). IMMUNE STATUS IN PATIENTS WITH PARASITIC DISEASES IN KHOREZM REGION. *Multidisciplinary Journal of Science and Technology*, 5(1), 514-517.