E CONF SERIES

International Conference on Multidisciplinary Sciences and Educational Practices
Hosted online from Rome, Italy
Website: econfseries.com 27th January, 2025

ACUTE HEMORRHAGIC CYSTITIS DISEASE IN CHILDREN AND ITS DEVELOPMENT IN THE CHILD'S DODY

Oxunova Mashhuraxon Jumaboy qizi
Assistant of the Department "Pediatrics",
Ferghana Medical Institute of Public Health

Uralov Husanboy
Student of Ferghana Medical Institute of Public Health

Annotation

Hemorrhagic cystitis is defined as a diffuse inflammatory condition of the urinary bladder due to an infectious or noninfectious etiology resulting in bleeding from the bladder mucosa. The most common cause is bacterial infection that usually responds promptly to treatment. But chronic and recurrent hemorrhagic cystitis often arises from anticancer chemotherapy or radiotherapy for the treatment of pelvic malignancies.

Keywords: acute hemorrhagic cystitis, infection, recurrent, adenovirus, E. choli.

Acute Hemorrhagic Cystitis Acute hemorrhagic cystitis (AHC) is usually a benign, selflimited disorder in healthy children. Adenovirus is the most common cause of viral AHC in children, with E. Coli occasionally involved. In a series of 69 infants and children with AHC, adenovirus 11 was recovered from the urine in 10 (14.5%), adenovirus 21 in 2 (2.9%), and E. coli in 12 (17.4%). However, the remainder (>60%) had no known infectious agents isolated from the urine. Conversely, children presenting with acute adenovirus respiratory infections may develop incidental microscopic or gross hematuria. In healthy children, no antiviral therapy is indicated, because the infection is self-limited. However, radiologic evaluation should be considered to rule out other causes of hematuria. More recently, AHC has been observed with increasing frequency in children undergoing bone marrow transplantation (BMT). AHC can be divided into pre-engraftment and post-engraftment subtypes, each with unique etiologies. The pre-engraftment AHC is a

result of agents known to be urinary tract toxins, such as cyclophosphamide used to condition the recipient before BMT. Hydration and use of 2-mercaptoethan sulfonate (MESNA) may prevent this type of AHC. The post-engraftment subtype is more common, occurs 2 weeks to 4 months after BMT, and can be life-threatening. BK virus, a ubiquitous DNA virus of the polyomavirus genus, has increasingly been implicated as the causative agent for AHC in this population. Whereas asymptomatic BK virus infection is present in more than 50% of children younger than 10 years of age, the BMT host allows the BK virus to replicate unchecked in the urothelium. After engraftment, the host immune response reacts to the virus in the urothelium, resulting in mucosal injury and hemorrhage. Preliminary studies have shown that fluoroquinolones decrease the urinary concentrations of the BK virus when used in a prophylactic fashion, via inhibition of DNA gyrase. However, larger studies demonstrating prevention of AHC are needed. Treatment of AHC in these children is primarily supportive, because no standardized drug regimen has been developed. Mild cases may be treated with aggressive hydration. More severe cases may require continuous bladder irrigation and fulguration. Immunocompromised children are also at risk for adenovirus-associated hemorrhagic cystitis, and intravenous ribavarin has anecdotally been used to treat such an infection. Cidofovir, a purine analogue, was used in series of BMT patients with some success, but use is limited by nephrotoxicity of the agent.

All in all, HC is a common devastating life-threatening complication of bone marrow transplantation and cyclophosphamide-based chemotherapy. Thus, treatment with cyclophosphamide and bone marrow transplantation mandate preventive therapy but physicians should be aware of the fact that despite measures to prevent it, HC might be inevitable. Development of HC mandates immediate reaction and cooperation between the medical services. Bladder perforation is a rare but life-threatening complication, patients with severe HC, especially with recurrent clot retention, and uninhibited bladder contraction and those under continuous bladder irrigation should be monitored meticulously.

Reference:

1. Tohirbek To'lqinjon o'g, S. (2024). Successful testicular sperm extraction in an infertile man with non-obstructive azoospermia and hypergonadotropic

hypogonadism presenting with bilateral atrophic testis: a case report. Miasto Przyszłości, 48, 186-188.

2. Uzbekistan, O. F. To verify Questionnaire of the “Uzbek Index of Premature Ejaculation”.
3. Ibroxim o‘g, G. A. H. (2023). ARTERIAL HYPERTENSION AND COGNITIVE DISORDER. Procedia of Engineering and Medical Sciences, 8, 126-133.
4. Иргашева, М. Д. (2024). ОСОБЕННОСТИ ПЕРСОНАЛИЗИРОВАННОГО ОБУЧЕНИЯ. PEDAGOG, 7(11), 250-254.
5. Уразалиева, И. Р., & Иргашева, М. Д. (2021). ОПРЕДЕЛЕНИЕ СТЕПЕНИ ИНФОРМИРОВАННОСТИ ПАЦИЕНТОВ С САХАРНЫМ ДИАБЕТОМ О ПРОГРАММЕ УПРАВЛЕНИЯ ЗАБОЛЕВАНИЯМИ. Интернаука, (2-1), 50-51.
6. Masrurjon o‘g‘li, M. M. (2024). COMMON THYROID DISEAGES, CAUSES AND ITS TREATMENT METHODS. Miasto Przyszłości, 48, 223-232.
7. Masrurjon o‘g‘li, M. M. (2024, May). HUMAN GROWTH HORMONE. In Proceedings of Scientific Conference on Multidisciplinary Studies (Vol. 3, No. 5, pp. 117-125).
8. Muxammadrasul, M. (2024, May). Etiology and Pathophysiology of Diabetes Mellitus. In International Congress on Biological, Physical And Chemical Studies (ITALY) (pp. 92-96).
9. Kamalovich, S. I. (2024). Congenital Esophageal Malformations in Children, Symptoms, Diagnosis and Treatment. Miasto Przyszłości, 53, 1241-1243.
10. Болтабаев, М. У. (2023). КОРОНАВИРУС (COVID-19) ХАМРОҲ КАСАЛЛИК БИЛАН КЕЧГАНДА КАСАЛЛИКДАН КЕЙИНГИ РЕАБЛИТАЦИЯ ДАВРИДА АНИҚЛАНАДИГАН ЎЗГАРИШЛАР ВА УЛАРНИ БАРТАРАФ ЭТИШ ЧОРАЛАРИ. Scientific Impulse, 2(13), 178-182.
11. Zakhriddinovich, I. B. (2024, June). Migraine in Children and its Causes, Symptoms and Treatment. In Interdisciplinary Conference of Young Scholars in Social Sciences (USA) (Vol. 7, pp. 29-32).

12. Erkinovich, M. B. (2023). IMPROVING THE EFFECTIVENESS OF FIRST AID TO PATIENTS WITH POLYTRAUMA. Western European Journal of Medicine and Medical Science, 1(4), 67-71.
13. Erkinovich, M. B. (2023). Prevention and Modern Treatment of Fatty Embolism in Traumatological Patients. Eurasian Medical Research Periodical, 21, 158-164.
14. Erkinovich, M. B. (2022). Increase the Effectiveness of Prevention and Treatment of Osteoporosis. Central Asian Journal of Medical and Natural Science, 3(3), 811-818
15. Zakhriddinovich, I. B. (2024, May). Febrile Seizure Disease and its Symptoms, Treatment. In International Congress on Biological, Physical And Chemical Studies (ITALY) (pp. 121-124).
16. Алимова, И. А., Райимова, З. М., Бабаджанова, Х. М., & АКТУАЛЬНОСТЬ, В. (2022). РАННЕГО ВМЕШАТЕЛЬСТВА В СЕМЕЙНЫЕ ПОЛИКЛИНИКИ ДЕТЯМ РАННЕГО ВОЗРАСТА. JOURNAL OF CLINICAL AND PREVENTIVE MEDICINE, 2, 5-11.
17. Alimova, I. (2021, January). BOLA TARBIYASIDA OTA-ONALARNING PSIXOLOGIK BILIMLARNI SHAKLLANTIRISHNING AHAMIYATI. In INTERNATIONAL CONFERENCES ON LEARNING AND TEACHING (Vol. 1, No. 1, pp. 131-132).
18. Анваровна А.И., Мелибаевна Б.Х., Максамаджоновна Р.З., Захриддиноич И.Б., Исломкулович У.М. (2023). Актуальность внедрения службы комплексного раннего вмешательства в семейных клиниках. BioGecko Журнал новозеландской герпетологии , 12 (03), 1139-1145.
19. Anvarovna, A. I., & Melibaevna, B. K. (2022). JUVENILE IDIOPATHIC ARTHRITIS. SCIENTIFIC JOURNAL OF RESEARCH IN MEDICINE (SJRM), 1(4), 6-8.
20. Melibayevna, B. X. (2023). Measures to Improve the Quality of Life of Patients with Comorbid Heart Pathology and Increase the Effectiveness of Their Treatment. Scholastic: Journal of Natural and Medical Education, 2(3), 34-36.
21. Kamalovich, S. I. (2024, May). CONGENITAL HEART DEFECTS IN CHILDREN. In Proceedings of International Conference on Modern Science and Scientific Studies (Vol. 3, No. 5, pp. 65-71).

22. Rayimov, G. N., Tillaboldiyev, A. R., Saloxiddinov, N., & Sh, D. S. (2022). Actical Errors in Surgical Treatment of Strengthened Abdominal Hernias. The Peerian Journal, 5, 130-135.
23. Mahmudov, U. I. (2024). MANAGEMENT OF THYROID NODULES. JOURNAL OF INNOVATIONS IN SCIENTIFIC AND EDUCATIONAL RESEARCH, 7(4), 1-7.
24. Isakjonovich, S. M. (2024). Effectivness of Aromatherapy in Post-Covid Syndrome. Miasto Przyszłości, 49, 1239-1242.
25. Mahmudov, U. I. (2023). COMPARATIVE CHARACTERISTICS OF CLINICAL AND LABORATORY PARAMETERS OF PATIENTS OF THE DIABETIC FOOT DEPARTMENT, DEPENDING ON THE PRESENCE OR ABSENCE OF DIABETES MELLITUS. SO 'NGI ILMIY TADQIQOTLAR NAZARIYASI, 6(12), 355-360.
26. Nazirtashova, R. M. (2023). XALQ TABOBATIDA MAKKAJO „RINING O „RNI. Journal of Chemistry of Goods and Traditional Medicine, 2(1), 210-216.
27. Mamadaliyevna, N. R. (2023). INSONIYAT O'ZINI O'ZI ZAHARLAMOQDA. " GERMANY" MODERN SCIENTIFIC RESEARCH: ACHIEVEMENTS, INNOVATIONS AND DEVELOPMENT PROSPECTS, 9(1).
28. Nazirtashova, R. M., & Kirgizov, S. M. (2021). Research Of Pentosal Hydrolysis Products Of Plant Waste. The American Journal of Applied sciences, 3(04), 126-130.
29. Matyakubov, R., & Nazirtashova, R. M. (2021). Valuable Raw Materials For Producing Furfural. The American Journal of Interdisciplinary Innovations and Research, 3(06), 159-165.
30. Назирташова, Р. М. (2022). ДИНАМИЧЕСКОЕ ИССЛЕДОВАНИЕ КАРДИОРЕСПИРАТОРНОЙ СИСТЕМЫ УЧЕНИКОВ СПОРТИВНЫХ ШКОЛ К ОБУЧЕНИЮ В УСЛОВИЯХ ПОВЫШЕННОЙ СЛОЖНОСТИ. BARQARORLIK VA YETAKCHI TADQIQOTLAR ONLAYN ILMIY JURNALI, 90-94.
31. Анварова, З. (2024). СПИД/ВИЧ ИФИЦИРОВАНИЕ И ДЕТИ. THEORY AND ANALYTICAL ASPECTS OF RECENT RESEARCH, 2(22), 41-45.

32. Анварова, З. (2024). ЗАДЕРЖКА ВНУТРИУТРОБНОГО РАЗВИТИЯ ПЛОДА КАК ФАКТОР НАРУШЕНИЯ ГАРМОНИЧНОГО РАЗВИТИЯ ДЕТЕЙ. THEORY AND ANALYTICAL ASPECTS OF RECENT RESEARCH, 2(21), 234-237.
33. Qosimovna, A. Z. (2023). Factors that lead to asphyxia in babies. American Journal of Pediatric Medicine and Health Sciences (2993-2149), 1(10), 740-743.
34. Абдуллаев, С. (2024). АКТУАЛЬНОСТЬ ПРОБЛЕМ РАЗВИТИЯ ОСТРЫХ ПНЕВМОНИЙ У ДЕТЕЙ. THEORY AND ANALYTICAL ASPECTS OF RECENT RESEARCH, 2(22), 29-33.
35. Mukhtarzhanovna, I. G. (2024, May). Development of Principles of Study and Treatment of Vaginal Dysbiosis During Pregnancy. In International Congress on Biological, Physical And Chemical Studies (ITALY) (pp. 112-115).
36. Mukhtorjonovna, I. G. (2024). Modern Surgical Methods of Placental Aggregation. Web of Semantics: Journal of Interdisciplinary Science, 2(5), 412-416.
37. Solijon o‘g‘li, A. S. (2024). BACTERIAL, VIRAL AND MUCOPLASMA PNEUMONIA IN CHILDREN. American Journal of Pediatric Medicine and Health Sciences (2993-2149), 2(1), 273-280.
38. Абдуллаев, С. (2024). ПСИХОЛОГИЧЕСКИЕ ОСОБЕННОСТИ УЧЕБНЫХ ИГР В ПОДГОТОВКЕ СТУДЕНТОВ МЕДИЦИНСКИХ ИНСТИТУТОВ. FORMATION OF PSYCHOLOGY AND PEDAGOGY AS INTERDISCIPLINARY SCIENCES, 2(25), 222-224.
39. Александровна, А.Е. (2023). ОСНОВНЫЕ АСПЕКТЫ РЕСПИРАТОРНОЙ РЕАБИЛИТАЦИИ ПОСЛЕДСТВИЙ НОВОЙ КОРОНАВИРУСНОЙ ИНФЕКЦИИ У ДЕТЕЙ С БРОНХОЛЕГОЧНЫМИ ЗАБОЛЕВАНИЯМИ. Всемирный бюллетень социальных наук , 18 , 81-83.
40. Abdullaev, S. S. (2023). TO THE QUESTION OF COMMUNITY-ACCOMPANIED PNEUMONIA IN YOUNG CHILDREN. Journal of Social Sciences and Humanities Research Fundamentals, 3(05), 51-53.
41. Худайназарова, С. Р., Курьязова, Ш. М., & Охунова, М. Ж. (2023). ОСОБЕННОСТИ БРОНХООБСТРУКТИВНОГО СИНДРОМА ПРИ

ВНЕБОЛЬНИЧНОЙ ПНЕВМОНИИ У ДЕТЕЙ РАННЕГО ВОЗРАСТА. Interpretation and researches, 1(6).

42. Анварова, З. (2024). СПИД/ВИЧ ИФИЦИРОВАНИЕ И ДЕТИ. THEORY AND ANALYTICAL ASPECTS OF RECENT RESEARCH, 2(22), 41-45.
43. Анварова, З. (2024). ЗАДЕРЖКА ВНУТРИУТРОБНОГО РАЗВИТИЯ ПЛОДА КАК ФАКТОР НАРУШЕНИЯ ГАРМОНИЧНОГО РАЗВИТИЯ ДЕТЕЙ. THEORY AND ANALYTICAL ASPECTS OF RECENT RESEARCH, 2(21), 234-237.
44. Alexandrovna, A. E. (2023). Clinical and functional features of the bronchopulmonary system in chronic kidney disease. Texas Journal of Medical Science, 16, 57-59.