

**CLINICAL EVALUATION OF THE EFFECTIVENESS OF  
ERGOFERON IN THE TREATMENT OF CROUP IN CHILDREN**

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***Annotation:*** *The article presents up-to-date information on the clinical picture, diagnosis and treatment of croup in children. Croup (from the Scottish «croup» – croak) is a term used to refer to inflammation of the larynx of various etiologies with various morphological changes, which are accompanied by difficulty breathing due to laryngeal stenosis [1, 2]. Clinically, the symptom complex of croup is characterized by a triad of signs - a hoarse voice, barking cough and stridor [3, 4]. Stridor is a rough sound during inhalation caused by an obstacle to the passage of air in the oropharynx, subclavian space or in the trachea [5-9]. Viral croup is the main cause of upper respiratory tract obstruction in early childhood [10-14]. The average incidence is 3%, with 9% of children in need of intensive care. Of the annually recorded number of acute respiratory diseases in children, acute stenosing laryngotracheitis occurs in 7.5–8.0% of cases [15-18]. The most common cause of croup in children is the parainfluenza virus (75%), more often 2-3 types. Less often, the etiological factors of croup are influenza viruses, adenoviruses, respiratory syncytial virus, enteroviruses, metapneumovirus, coronavirus, herpesviruses, including Varicella-Zoster virus,*

*rhinoviruses, measles and mumps viruses [19-22]. The predisposing factors for the development of croup are the anatomical and physiological features of the child's larynx [23-24]. Laryngeal obstruction in viral croup is caused by three components: swelling of the subclavian space; reflex spasm of the smooth muscles of the larynx; obstruction of the respiratory tract with viscous mucus, and with bacterial superinfection also with crusts and films [25].*

**Keywords:** *children, croup, clinical efficacy, ergoferon, treatment*

**The purpose of the study.** The aim of this work was a comparative assessment of the effectiveness of the antiviral drug with immunomodulating activity of Ergoferon in the complex conventional therapy in the treatment of acute stenosing laryngotracheitis in children.

**Material and methods.** Under the supervision were 65 children aged 6 months to 3 years with a diagnosis of acute stenosing laryngotracheitis, who sought medical help from the pediatric unit of the Samarkand branch of the Republican Scientific Center for Emergency Medical Care. All examined were divided into 2 groups of children: the I-group consisted of 33 children who received the drug Ergoferon against the background of generally accepted basic therapy, the II-group (control), which included 32 children who received conventional therapy.

All patients met the inclusion / exclusion criteria (day 1-2 of the disease, acute onset, the presence of symptoms of intoxication, the absence of antiviral, anti-inflammatory, antibacterial and immunomodulating therapy before taking Ergoferon). Ergoferon was prescribed in the first 2 hours by mouth, 1 tablet every 30 minutes, then 1 tablet 3 times a day, for 5 days against the background of basic therapy. All the children we observed were examined by general clinical research methods, followed by an assessment of anamnestic, clinical and laboratory data.

**Discussion of the results.** The study showed that against the background of Ergoferon treatment, there was a statistically significant shortening of the febrile period by an average of 0.5-0.9 days, a decrease in the duration of

pharyngeal hyperemia by 0.8-1.6 days. For other indicators (lethargy, weakness, decreased appetite, hoarseness, barking cough, wheezing in the lungs), there was no significant difference in the studied groups. However, for most clinical symptoms (intoxication, catarrhal symptoms) in the main group there was a more pronounced positive dynamics compared with the control group. In the main group, not a single complication was recorded, neither during treatment with the drug, nor after its cancellation.

At the same time, complications were revealed in the comparison group, both from the upper respiratory tract and from the gastrointestinal tract. In addition, it should be noted that Ergoferon was well tolerated by patients, combined with symptomatic therapy. No adverse reactions and subjective complaints associated with the use of the drug were noted. No temperature increase was noted. Objective clinical data and hemogram indicators corresponded to the age norm. Urine analysis on the first and last day of the study did not reveal any pathology in any subject. Allergic manifestations were not recorded in both groups.

**Conclusions.** Ergoferon is effective in treating children aged 6 months to 3 years with acute stenosing laryngotracheitis. During treatment with Ergoferon, there is a statistically significant decrease in severity and a shortening of the duration of most clinical symptoms, a more pronounced positive dynamics compared with the control group.

### **References:**

1. Абдуллаева, З. Х., Азимова, Г. А., Уралов, Ш. М., & Нажмиддинова, Н. К. (2014). Об эффективности проведения экспресс-диагностики возбудителей внебольничной пневмонии у детей. In Молодежь и медицинская наука в XXI веке (с. 29-30).
2. Гарифулина, Л., Рустамов, М., Кудратова, Г., & Уралов, Ш. (2014). Урсодексихолевая кислота в терапии вирусных хронических гепатитов у детей. Журнал проблемы биологии и медицины, (3 (79)), 95-96.

3. Геппе Н.А., Кондюрина Е.Г., Мельникова И.М. Релиз-активный противовирусный препарат эргоферон в лечении острых респираторных инфекций у детей. // Педиатрия. Журнал им. Г. Н. Сперанского. 2019. №1.
4. Никифоров В.В., Руженцова Т.А. Клиническая эффективность и безопасность Эргоферона при гриппе и других острых респираторных вирусных инфекциях // Инфекционные болезни. 2019. №4 (31).
5. Рустамов, М. Р., Ибатова, Ш. М., Уралов, Ш. М., Атаева, М. С., & Юсупова, М. М. (2008). О составе высших жирных кислот при витамин Д-дефицитном рахите. Вестник врача общей практики, (3), 54-56.
6. Улугов, Х. Х., Уралов, Ш. М., Шакаров, Ф. Р., & Гафурова, М. Э. (2014). Об эффективности противовирусного препарата Генферон лайт при лечении острых бронхитов у детей раннего возраста. In Молодежь и медицинская наука в XXI веке (pp. 92-92).
7. Умарова, С., Уралов, Ш., Гарифулина, Л., & Шамсудинова, Д. (2014). Изучение степени бронхиальной обструкции у детей, страдающих острым бронхитом. Журнал проблемы биологии и медицины, (3 (79)), 159-160.
8. Uralov Sh.M., Rustamov M.R., Zakirova B.I., Abdusalyamov A.A. The state of gluconeogenic liver function in children with gastroduodenal pathology depending on the duration of the disease // Vyatka Medical Bulletin, 2006, No. 2, - 61-62 p.
9. Ibatova, S. M., Uralov, S. M., & Mamatkulova, F. K. (2022). Bronchobstructive syndrome in children. Web of Scientist: International Scientific Research Journal, 3(5), 518-522.
10. Kh, J. A., & Achilova, F. A. (2022). The state of the erythron system in acute pneumonia in children. Web of Scientist: International Scientific Research Journal, 3(5), 798-808.
11. Sh. Uralov (2024). Surunkali gastritli bolalarda jigar funktsional holatining buzilishi va uni korrektsiyalash. Журнал гепато-гастроэнтерологических исследований, 1(5), 53-59.

12. Sh. Uralov, I. Shamatov, Z. Shopulotova, & M. Kodirova (2024). Immunological indicators in stenosing laryngotracheitis in children. *Science and innovation*, 3 (D1), 81-86. doi: 10.5281/zenodo.10578214
13. Uralov Shukhrat Mukhtarovich, & Kholikova Gulnoz Asatovna. (2023). Occurrence of functional constipation in children of different age. *British Journal of Global Ecology and Sustainable Development*, 17, 32–38. Retrieved from <https://journalzone.org/index.php/bjgesd/article/view/351>
14. Uralov Shukhrat, E. E. Kobilov, H. F. Batirov, M. K. Tukhtaev and V. B. Agzamov. Clinical and anamnestic characteristics of children with chronic gastroduodenal pathology. *BIO Web Conf.*, 76 (2023) 01014. DOI: <https://doi.org/10.1051/bioconf/20237601014>
15. Уралов Шухрат, Аралов Мирзо, & Нажимов Шахбоз. (2024). Использование электронной программы оценки степени тяжести обезвоживания при диареях у детей и выбора оптимальной тактики лечения. *Uz-Conferences*, 690–694. Retrieved from <https://uz-conference.com/index.php/p/article/view/601>
16. Уралов Шухрат, Ачилова Феруза, & Абдукадилова Наргиза. (2024, май 2). Результаты комплексной оценки функционального состояния печени у детей с хронической гастродуоденальной патологией. <https://doi.org/10.5281/zenodo.11103035>
17. Уралов, Ш. (2020). COVID-19 pandemiyasi davrida chaqaloqlarni ko'krak suti bilan oziqlantirish bo'yicha tavsiyalar sharhi. *Журнал гепатогастроэнтерологических исследований*, 1(1), 98-103.
18. Уралов, Ш. М., Аралов, М. Ж., & Холикова, Г. А. (2022). О современных методах лечения острого стенозирующего ларинготрахеита у детей. *Международный журнал научной педиатрии*, (5), 25-31.
19. Уралов, Ш. М., Жураев, Ш. А., & Исраилова, С. Б. (2022). О влиянии факторов окружающей среды на качество жизни и здоровье молодежи. *So'ngi ilmiy tadqiqotlar nazariyasi*, 1(3), 6-13.

20. Уралов, Ш. М., Жураев, Ш. А., & Рахмонов, Ю. А. (2022). Управляемые предикторы бронхиальной астмы у детей, перенесших бронхообструктивный синдром в анамнезе. *O'zbekistonda fanlararo innovatsiyalar va ilmiy tadqiqotlar jurnali*, 1(9), 376-381.
21. Уралов, Ш. М., Облокулов, Х. М., & Мамутова, Э. С. (2020). О неспецифической профилактике коронавирусной инфекции. In *Актуальные вопросы современной науки* (pp. 132-134).
22. Уралов, Ш. М., Рустамов, М. Р., Закирова, Б. И., & Абдусалямов, А. А. (2006). Состояние глюконеогенной функции печени у детей с патологией гастродуоденальной зоны в зависимости от давности заболевания. *Вятский медицинский вестник*, (2), 61-62.
23. Уралов, Ш., Рустамов, М., & Халиков, К. (2022). Изучение глюконеогенной и мочевинообразовательной функции печени у детей. *Журнал гепато-гастроэнтерологических исследований*, 2(3.2), 18–20.
24. Уралов, Ш., Абдусалямов, А., Ибатова, Ш., & Умарова, С. (2014). Результаты проведенного анкетирования матерей, дети которых страдают острой респираторно-вирусной инфекцией. *Журнал Проблемы биологии и медицины*, (3 (79)), 164-165.
25. Уралов, Ш. М., Жалилов, А. Х., Аралов, М. Ж., & Холикова, Г. А. (2022). Методы лечения острого стенозирующего ларинготрахеита у детей на современном этапе. *Scientific impulse*, 1(2), 19-28.