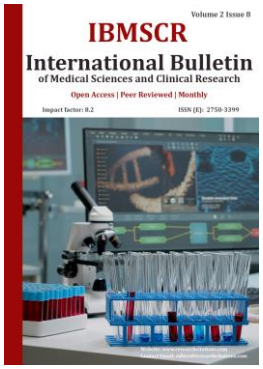

ADVANNAGES OF PALATE LASER THERAPY IN COMPLEX TREATMENT OF LARINGITIS

Shamatov Islom Yakubovich
docent
Shopulotova Zarina Abdumuminovna
assistant
Samarkand State Medical University, Samarkand, Uzbekistan
https://doi.org/10.5281/zenodo.8401400

Summary: The article presents data on the results of treatment of children with acute catarrhal laryngitis in the city of Samarkand using two treatment methods. The study included 57 children who were admitted to a multidisciplinary regional children's care center. The study shows the difference between traditional treatment and treatment using nebulizer therapy in combination with medication. According to the results, recovery and overall improvement were greater in the main group than in the comparison group.

Key words: acute laryngitis (AL), nebulizer, antibacterial therapy, children, catarrhal and infiltrative changes.

Relevance. Despite the prevalence of acute laryngitis (AL) and the number of treatment methods known to science, the issues of improving methods of treating the disease are still relevant. The increase in the incidence of acute laryngitis and its progressive course not only harm the patient's body, but also cause enormous economic damage.

Active methods that have priority in laryngology include the development of new effective treatment methods by creating high concentrations of drugs in the respiratory tract, reducing side effects and reducing the drug load in this group of patients to the required minimum level.

Goal of work. To study the superiority of nebulizer therapy in children with acute catarrhal laryngitis in complex therapy.

Materials and methods of research. During 2020-2022, the hospital included 57 patients aged 6 to 18 years who were treated in the otolaryngological, intensive care and children's departments of the Samarkand Regional Multidisciplinary Medical Center.

There were more boys than girls in the study group: 32 (56.1%) and 25 (43.9%), respectively. All patients were divided into two groups depending on the treatment method - main (34 children) and control (23 children). The selection criterion was the presence of acute catarrhal and infiltrative laryngitis.

All patients underwent a standard otolaryngological examination, as well as a complete blood count, urinalysis, chest radiography or computed tomography.

The main group received nebulizer therapy along with traditional treatment. When choosing an antibacterial agent, we took into account the clinical symptoms of laryngitis, a wide range of triggers, good penetration into the mucous membrane of the upper respiratory tract, good tolerability of the drug, and a small number of side effects.

Results. The average age of the patients was 10.7±3.15. Almost all patients were admitted on the 2-3rd day of the disease; according to the anamnesis, all patients tried independent treatment at home. Due to deterioration of their condition, they went to the hospital.

Sodium aminodihydrophthalazindione, which met all of the above requirements, became the drug of choice among antibiotics in the treatment of AL. The mechanism of action of the drug is associated with its ability to control the functional and metabolic activity of innate and adaptive immunity (as well as monocytes, macrophages, neutrophils, natural killer cells).

The drug normalizes the phagocytic activity of monocytes and macrophages, the bactericidal activity of neutrophils and the cytostatic activity of NK cells. In this case, the drug restores weakened innate and acquired immunity, increases the body's resistance to infectious diseases of bacterial, viral and fungal etiology, ensures a slightly faster exit of the pathogen from the body, and reduces the frequency, manifestation and duration of infection.

In addition, Sodium aminodihydrophthalazindione normalizes the formation of antibodies, increases the functional activity (affinity) of antibodies, and indirectly regulates the production of endogenous interferons (IFN-α, IFN-γ) by producer cells.

The drug suppresses the production of large amounts of TNF-α, IL-1, IL-6 and other inflammatory cytokines with high activity in inflammatory diseases by macrophages for 6-8 hours. Determines. Galavit reduces the production of reactive oxygen species by highly active macrophages, thereby reducing the level of oxidative stress and protecting tissues and organs from the damaging effects of free radicals. Normalization of excessively high functional activity of phagocytic cells, restoration of their antigen-presenting and regulatory functions leads to a decrease in autoaggression.

The drug is well tolerated and does not exhibit allergenic, mutagenic, embryotoxic, teratogenic or carcinogenic effects.

We provided nebulizer therapy to the patients of the main group using a compression nebulizer (Pharm "Yuria"). The first three days, Nebutamol inhalation solution was used, the next two days, Decasan solution. The device consists of two main components of an air flow generator (compressor), which is a gas flow and a liquid spray source (flasks for spraying medicines) - air-water and nebulizers with different nozzles, respectively.

When treating patients, we complied with the general requirements and rules for nebulizer therapy. In the main group of patients, inhalation therapy with nebutamol and decasan was carried out in mode 2 (dispersion of aerosol particles 2-10 microns), which is important for therapeutic effects on the upper respiratory tract. During the first 3 days, we administered two nebutamol treatments, each lasting 10 minutes. In the next 2 days, similar inhalation therapy with the drug dekasan was carried out. At the same time, the clinic adopted basic therapy, which included antihistamines, mucolytics, and, if necessary, glucocorticosteroids were administered intramuscularly. The control group received generally accepted treatment methods, namely parenteral administration of an antibacterial agent (penicillin group); antihistamines (suprastin, claritin); mucolytics (mucaltin, bromhexine); involves intramuscular administration of glucocorticoids if necessary.

Subjective complaints of patients, laryngoscopic picture, dynamics of breathing and vocal functions were used as the effectiveness of treatment measures.

Evaluation of the effectiveness of treatment was carried out at the end of the patient's inpatient treatment. We set a score, where 1 point means no effect, 2 points means a satisfactory effect, 3 points means a positive effect.

The analysis showed that 31 (91.6%) patients in the main group and 16 (69.6%) patients in the control group had a positive assessment of the treatment outcome.

A satisfactory result was recorded in 3 (8.4%) patients of the main group and 5 patients of the control group.

Conclusions. Thus, a comparative analysis showed that nebulizer therapy, carried out along with traditional therapy, has an obvious effect, and also shows its advantage over the parenteral use of antibacterial agents in the treatment of acute laryngitis. It is also necessary to note that the correct choice of drugs leads to rapid stabilization of the condition and improvement of the general condition.

References:

1.Ариненко Р. Ю., Аникин В.Б., Головкин В.И. Система интер¬ферона: первая линия защиты организма // Terra Medica. – 2007. - №4. - С. 11-14.

2.Василенко Ю.С. Ингаляционная небулайзерная терапия при заболе¬ваниях верхних дыхательных путей и голосового аппарата,- М., 2000.- 18 с.

3.Исламов Ш. Э. и др. Дефекты оказания медицинской помощи в практике оториноларингологии //Достижения науки и образования. – 2020. – №. 4 (58). – С. 50-53.

4.Заплатников А.Л. Острые респираторные инфекции у детей: со¬временные возможности этиотропной терапии // Русский медицинский журнал. - 2004. – Том.10, №3. - С. 103-107.

5.Насретдинова М., Шаматов И., Коржавов Ш. ЭФФЕКТИВНОСТЬ НЕКОТОРЫХ МЕТОДОВ ЛЕЧЕНИЯ БОЛНЫХ С ПОЛИПОЗНЫМ РИНОСИНУСИТОМ //Журнал вестник врача. – 2021. – Т. 1. – №. 2. – С. 71-74.

6.Шаматов И. и др. ВОЗМОЖНОСТИ КОМПЬЮТЕРНОЙ И МАГНИТНО-РЕЗОНАНСНОЙ ТОМОГРАФИИ В ВИЗУАЛИЗАЦИИ ПОЛОСТИ НОСА И ВЕРХНЕЧЕЛЮСТНОЙ ПАЗУХИ //Журнал вестник врача. – 2021. – Т. 1. – №. 2. – С. 113-115.

7.ШАМАТОВ И., БОЛТАЕВ А., ШОПУЛОТОВА З. КОМПЛЕКСНОЕ ПРИМЕНЕНИЕ МЕТОДОВ РЕГИОНАРНОЙ АНТИБИОТЕРАПИИ И ФИЗИОТЕРАПИИ ПРИ ОДОНТОГЕННОМ ВОСПАЛЕНИИ ПОЛОСТИ ВЕРХНЕЧЕЛЮСТНОЙ ПАЗУХИ //International Bulletin of Medical Sciences and Clinical Research. – 2023. – Т. 3. – №. 3. – С. 29-33.

8.Шаматов И. Я. и др. Комплексное лечение хронического риносинусита в стадии обострения //Re-health journal. – 2019. – №. 2. – С. 5-10.

9.Шаматов И. Я., Хушвакова Н. Ж., Бурханов У. М. Эндоскопическая ультразвуковая дезинтеграция при гипертрофическом рините с одновременной коррекции устья слуховых труб //БИОЛОГИЯ ВА ТИББИЁТ МУАММОЛАРИ PROBLEMS OF BIOLOGY AND MEDICINE ПРОБЛЕМЫ БИОЛОГИИ. – 2019. – С. 144.

10.Amirav I, Balanov 3, Gorenberg M, Groshar D, Luder AS. Nebuliser hood compared to mask in wheezy infants: aerosol therapy without tears! // Israel, Safed. ArchDis Child. -2003. -V.88. -N.8. -P.719-723.

11.Kamalova D. AUTOIMMUN QALQONSIMON BEZ KASALLIKLARINING HOMILAGA TA'SIRI //Евразийский журнал медицинских и естественных наук. – 2023. – Т. 3. – №. 4. – С. 73-76.

12.Kurbaniyazova F. Z. MORPHOLOGICAL STUDY OF THE ENDOMETRIUM IN WOMEN OF REPRODUCTIVE AGE WITH ABNORMAL UTERINE BLEEDING //International Bulletin of Medical Sciences and Clinical Research. – 2023. – Т. 3. – №. 9. – С. 20-23.

13.Shamatov I. Y., Shayqulov H. S. H., Shopulotova Z. A. O'RTA QULOQNING ZAMBURUG'LI ZARARLANISHLARI //Евразийский журнал медицинских и естественных наук. – 2022. – Т. 2. – №. 6. – С. 425-427.
14.Shopulotova Z. COMPARATIVE ANALYSIS OF CLINICAL CASES OF EXACERBATION OF CHRONIC PYELONEPHRITIS IN PREGNANT WOMEN //International Bulletin of Medical Sciences and Clinical Research. – 2023. – Т. 3. – №. 8. – С. 22-25.
15.Shopulotova Z. A., Zubaydilloeva Z. K. THE VALUE OF ULTRASOUND DIAGNOSTICS IN PREGNANT WOMEN WITH CHRONIC PYELONEPHRITIS //Бюллетень студентов нового Узбекистана. – 2023. – Т. 1. – №. 9. – С. 19-22.
16.Shopulotova Z. A., Zubaydilloeva Z. K., Khudoyarova D. R. COMORBID EVENTS IN PREGNANT WOMEN WITH PYELONEPHRITIS AND PREVENTION OF THESE CONDITIONS //Бюллетень педагогов нового Узбекистана. – 2023. – Т. 1. – №. 9. – С. 35-38.
17.Shopulotova Z. A., Zubaydilloeva Z. K. PERINATAL CARDIOLOGY: PREGNANCY AND CONGENITAL HEART DEFECTS //Евразийский журнал академических исследований. – 2023. – Т. 3. – №. 9. – С. 55-59.
18.Yakubovich S. I., Abdumuminovna S. Z., Batiobekovna A. N. Analysis of the Effectiveness and Errors of Medical Care //Eurasian Journal of Research, Development and Innovation. – 2023. – Т. 20. – С. 1-4.
19.Wright R.B., Pomerantz W.J., Luria J.W. New approaches to respiratory infections in children. Bronchiolitis and croup. // Etnerg Med Clin North Am. 2002 Feb; 20(1): 93-114.