



REHABILITATION MEASURES IN CHILDREN WITH RECURRENT FORMS OF BRONCHITIS IN OUTPATIENT CONDITIONS.

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ABSTRACT

Relapse of bronchial diseases is common in the younger population of Tashkent. Therefore, it is necessary to treat such patients in the ambulatory-polyclinic conditions in a timely and complex manner in order to increase the resistance of the body. Optimizing rehabilitation of recurrent types of bronchitis in children includes the implementation of the basic principles of medical rehabilitation covers the following: continuous and step-by-step rehabilitation types of treatment maximum timely start at the level; complex nature of treatment, social, psychological and other measures to be an individual approach to creating a rehabilitation program, taking into account the course of the process, the age, living conditions and style of the sick child.

Relapses of bronchial diseases are widespread among the child population. The share of recurrent bronchitis (RB) in the structure of all considered bronchopulmonary pathology in children under the age of 3 years is 34.3%, 4-6 years - 23.6%, 7-9 years - 25.7%, 10 years and older - 13.5% [2, 5, 8, 13, 15]. A tendency has been established for the growth rate of the incidence of respiratory diseases in children and adolescents to exceed the growth rate of the primary incidence in general (1, 2). These recurrent diseases, including recurrent nasopharyngitis and pharyngitis, are recorded not only in children of early and preschool age, among which the group of frequently ill children

(SIC) is most often formed, but also in children of any age and even in adults [3, 17-19]. At the same time, in Uzbekistan, the number of registered in 2018 year of dead children under the age of 1 year amounted to about 5.6 thousand, of which 60.8% died from conditions that drooping in the perinatal period, 16.6% - from more diseases of the respiratory organs, 11.7% - from congenital anomalies, 2.2% - from accidents, poisoning and injuries, 2.2% - from infectious and parasitic diseases, 0.8% - from diseases of the digestive system organs, 5.7% - from other diseases [4,14]. According to many authors, the frequency of recurrent forms of bronchitis with resistance to therapy is increasing due



to the ongoing evolution of viral and bacterial pathogens, a significant increase in secondary immunodeficiency states associated with environmental degradation, infectious and other causes [1,5,6,8].

In order to prophylaxis and prevent chronic bronchopulmonary pathology (BPP), GPs conduct dispensary observation and rehabilitation treatment in children in family polyclinics (FP). When organizing and implementing this work, the pediatric medical service is guided by a number of orders of the Ministry of Health of Uzbekistan: "On measures to organize the medical examination of the population", "On improving health care for children of an organized contingent in the Republic of Uzbekistan", which refers to the need to organize the provision of medical care to children in preschool and educational institutions, ensuring the quality of medical examinations [10,11]. Order of the Ministry of Health of Uzbekistan "On the introduction of preventive measures to the population in primary health care institutions", order No. 420 dated November 2, 2015 "On measures to improve the provision of medical services to children in an outpatient clinic" also indicates the need for correct and timely dispensary observation in primary health care [12,14].

Among the patients of the city family polyclinics of the city of Tashkent, there were more often children with recurrent bronchitis (RB) of preschool age. There were fewer patients of school age. In a number of cases, in patients of school and adolescence, RB turned into chronic bronchial diseases, in particular, into bronchial asthma (BA), leading to disability. At the same time, the costs of

treatment and care for children with recurrent bronchial diseases cause significant damage material damage not only to the child's family, but also to the country's budget as a whole. For this reason, rehabilitation children with relapses of acute bronchitis is actual problem for the pediatrician [6,13,16,18,22, 24].

Bronchitis against the background of an acute respiratory viral infection (ARVI), including repeated ones, is observed especially often in children under 6 years old in areas of industrial and domestic (passive smoking, stoves,) air pollution, which may be associated with bronchial hyperreactivity [1,9,18]. Recurrent bronchitis is bronchitis without obstructive symptoms, episodes of which are repeated 2-3 times within 1-2 years against the background of acute respiratory viral infections. The criteria for diagnosing a recurrent episode of the disease corresponds to the clinical and radiological signs of acute bronchitis. At the same time, clinical signs are subfebrile temperature, cough, diffuse dry and various wet rales in the lungs. X-ray: change lung pattern (possible strengthening and increase transparency) in the absence of infiltrative and focal shadows in the lungs [13, 17,21,22].

Optimization of rehabilitation measures in children with recurrent forms of bronchitis in outpatient settings includes the implementation of the basic principles of medical rehabilitation:

1. The earliest possible start of the implementation of rehabilitation treatment - the continuity and staging of rehabilitation measures.
2. The complex nature of medical, social, psychological and other activities.



3. An individual approach to the preparation of rehabilitation programs, taking into account the course of the process, age, conditions and lifestyle of a sick child.

It is necessary to strictly adhere to all stages of rehabilitation. The first stage (inpatient or hospital): provides for early rehabilitation (profile department of the hospital, home treatment) and late rehabilitation (rehabilitation department of the hospital, day hospital of the family clinic). It is intended for the treatment of the acute phase of diseases, for examinations requiring invasive procedures and constant monitoring of the patient.

The second stage is outpatient-polyclinic (dispensary-polyclinic). It provides for long-term dispensary observation, anti-relapse courses of treatment (local sanatoriums, day hospitals, the rehabilitation treatment department of a polyclinic), determining the mode of work and life, and an annual assessment of the effectiveness of rehabilitation.

The third stage is the sanatorium and resort, which provides for the elimination of the consequences of an illness or injury, the restoration of the functional ability of a sick child in specialized sanatoriums (local and in resort areas). At this stage of rehabilitation, mainly natural and preformed physical factors are used, as well as an organized rest regimen.

Rehabilitation at all three stages should be comprehensive medical, psychological and pedagogical and consist of several blocks: general health measures; correction of the underlying disease and concomitant deviations in the state of health; psychological and pedagogical rehabilitation. Mandatory components of

rehabilitation programs for children and adolescents are rational nutrition and lifestyle correction; general strengthening and physiotherapy exercises; pharmacological agents; physical methods [6,13,20, 23].

The goals of rehabilitation of children with bronchial inflammation are to reduce functional disorders until full recovery of functions in acute and recurrent diseases to prevent chronicity and complications [13].

Rehabilitation measures are divided into early and late, then restorative treatment and dynamic monitoring.

At the same time, for children who have had acute bronchitis or RB without obstruction, early rehabilitation includes the following areas: against the background of etiological treatment, interferonogenic anti-inflammatory drugs, bronchodilators, secretolytic agents, expectorants, protective and training current mode. Improve circulation at the level of the pulmonary circulation, conduct physiotherapy with anti-inflammatory action. At an early rehabilitation, we can only talk about immunotherapy, but not about immunocorrection [5]. Compliance with the daily routine, which is a rational distribution in time, the correct sequence to meet the basic physiological needs of the child's body in active wakefulness, sleep and food.

Early rehabilitation in children with RB occurring with an obstructive syndrome, in addition to the above, should also include: restriction of antigens in the surrounding microenvironment; exclusion of obligate allergens in the diet; basic therapy with a limited drug load is carried out in the presence of auscultatory



signs of bronchospasm; staged bronchodraining aerosol therapy;

Stage I - inhalation of secretolytic and secretomotor drugs (sodium chloride, sodium bicarbonate, chest collection, mineral waters);

Stage II - vibration massage in the drainage area position;

stages of aerosol therapy to replace each other strictly go sequentially 2 times a day for three-four days, depending on the severity of the broncho-obstructive syndrome.

Late rehabilitation - all factors of sanatorium treatment are prescribed. Immunotherapy is being carried out adaptogens of plant and animal origin. Antibacterial drugs are used prolonged methylxanthines, immunomodulation, vitamin therapy, microelements, enzymes with replacement purpose, exercise therapy, massage [5, 6, 8, 15, 24].

In the outpatient setting of a family clinic in children with acute and recurrent forms of bronchitis with signs of a viral infection, it is necessary to prescribe antiviral agents (rimantadine, for young children its special form in the form of 0.2% syrup - algirem, arbidol, aflubin, influenzaferon, anaferon for children, etc.).

Systemic antibiotic therapy is carried out only with mycoplasmal and chlamydial bronchitis (macrolides are used according to the scheme below). The appointment of erythromycin due to instability in the acidic environment of the stomach and low bioavailability is ineffective. The algorithm for the use of macrolides in children with chlamydial-mycoplasma infection is as follows: azithromycin - on the 1st day at a dose of 10 mg / kg, from the 2nd to the 5th day - 5 mg / kg 1 time per day. A necessary condition is to take the drug 1 hour before

or 2 hours after a meal. The course of treatment is 5-7 days; clarithromycin - 7.5-10 mg / kg per day (maximum daily dose of 500 mg) in 2 divided doses for 10-14 days; spiramycin - for children weighing more than 20 kg - 1.5 million units for every 10 kg of body weight per day in 2-3 doses for 10-14 days; roxithromycin - 5-8 mg / kg per day in 2 doses (maximum daily dose of 300 mg) for 10-14 days; josamycin - 30-50 mg per 1 kg of body weight per day in 3 divided doses. The course of treatment is 10-14 days. It should be emphasized that macrolides are well tolerated, most of them have a pronounced post-antibiotic effect. A distinctive feature of macrolides is a high ability to accumulate in the foci of inflammation, a long half-life, effective suppression of the reproduction of chlamydia, regardless of the timing of the start of treatment for chlamydia. The effect of macrolides is even more enhanced when they are combined with immunomodulating agents (viferon, leukinferon, amixin, cycloferon, sodium nucleinate, imunal, trimunal, etc.) [7, 16, 17, 20].

Antitussive drugs of central action suppress painful obsessive dry cough in the initial phase of bronchitis. Peripheral antitussives are indicated for dry cough associated with mucosal irritation, usually accompanying tracheitis. The drug of choice is Ambroxol, a mucolytic with an expectorant effect. The new anti-inflammatory agent fenspiride (Erespal) contributes to the reduction of inflammatory changes in the bronchial mucosa. A lot of drinking is required for bronchitis (warm tea, fruit drink, dried fruit compote, alkaline mineral water without gas) approximately ml / kg per day; massage with chest drainage.



Evidence of the effectiveness of therapy is the normalization of body temperature and well-being, a decrease in cough and wheezing in the lungs. If febrile fever persists for more than 3 days, it is required to resolve the issue of prescribing systemic antibiotics.

To consolidate positive results for children with recurrent bronchitis, year-round therapeutic and prophylactic measures are indicated for immunocorrection: 2 courses of an immunomodulator with an interval of 6 months or 3 courses of licopide with an interval of 4 months, depending on the initial changes in the immune system [9].

Sanatorium-and resort treatment - treatment of patients and rehabilitation of practically healthy persons (vacationers) in sanatorium-resort-type institutions located in resort areas and resorts. On the territory of Central Asia there are specialized sanatoriums for bronchopulmonary pathologies, in particular Aktash, Zomin, Chimgan). They use halochambers, with the help of the latest technologies, the necessary climatic conditions and the natural microclimate of natural salt caves are recreated.

Physical culture includes personal hygiene, daily routine, rational nutrition. A complex of physical exercises involves all parts of the nervous system, from the cerebral cortex to peripheral receptors, as well as endocrine and humoral mechanisms, into the orbit of its influence. Hardening of the body contributes to the development of protective adaptive reactions of the body, improves the mechanisms of thermoregulation. When prescribing hardening procedures, it is necessary to divide children into groups: the first includes healthy, previously

hardened children (any procedures can be prescribed to them), the second - healthy, not previously hardened (all measures should be gradual), to the third - convalescent children after diseases and with chronic pathology, who need a sparing method of hardening [4-6, 8, 23, 24].

Among the non-drug methods of rehabilitation, the well-deserved primacy belongs to phytotherapy. Its advantage is determined by the absence of complications and the possibility of long-term use in chronic processes. Acupuncture is an effective method of treatment and rehabilitation. Currently, a number of methods of reflex therapy are used. These include: the classic method of acupuncture, moxibustion, electroacupuncture and laser reflexology. Contraindications to acupuncture are benign and malignant tumors, the presence of fever, infectious diseases, influenza, tonsillitis, severe heart disease, kidney disease, active form tuberculosis [4-6, 8, 15].

Dynamic observation: the local doctor examines the child once a quarter, the otorhinolaryngologist - 2 times a year. Additional studies: conduct allergic tests, examine the function of external respiration (determine peak expiratory speed). Patients are removed from the register in the absence of clinical and laboratory abnormalities within 3 years [3-6, 8].

Properly developed and timely comprehensive methodology for the rehabilitation of children with recurrent forms of bronchitis in medical institutions can improve the child's function of external respiration, the drainage function of the bronchi, reduce the frequency of relapses and chronicity of the disease.



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