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Intensive therapy emergency states in acute intestinal infections in children

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ABSTRACT

Despite the successes achieved in the fight against many infectious diseases, the problem of diarrheal diseases in Uzbekistan, as well as throughout the world, continues to be relevant. The medical and social significance of the problem is de – termined not only by the significant spread of diseases, but also by the high fre – 150 quency of severe complicated forms of the disease, especially among young children. In addition, diarrheal diseases indirectly contribute to an increase in the incidence of other infections, as they lead to depletion and, as a result, to a decrease in the body's resistance. Despite the sufficiency of literature data on the study of diarrheal diseases and their treatment, many clinical and organizational aspects of the problem of acute intestinal infections, especially in young children, remain unresolved. Treatment of an emergency in acute intestinal infections (ACI) often reduces only to the elimination of various degrees of exsiccosis using oral and intravenous rehydration.

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Bolalardagi o‘tkir ichak infektsiyalarida intensiv terapiya shoshilinch holatlari

Kalit so‘zlar:
diareya,
yuqumli kasalliklar,
o‘tkir ichak infeksiyalari,
regidratatsiya.

ANNOTATSIYA

Ko‘pgina yuqumli kasalliklarga qarshi kurashda erishilgan yutuqlarga qaramay, O‘zbekistonda, shuningdek butun dunyoda diareya kasalliklari muammosi dolzarb bo‘lib qolmoqda. Muammoning tibbiy va ijtimoiy ahamiyati nafaqat kasalliklarning sezilarli darajada tarqalishi, balki yuqori darajadagi yuqumli kasalliklar bilan ham belgilanadi. Kasallikning og‘ir murakkab shakllari, ayniqsa yosh bolalar orasida kuzatilmoqda. Bundan tashqari, diareya kasalliklari bilvosita boshqa infeksiyalarning paydo bo‘lishining kuchayishiga yordam beradi, chunki ular tükenmeye olib keladi va natijada tanadagi qarshilikning pasayishiga olib keladi. Diareya kasalliklarini o‘rganish va ularni davolash bo‘yicha adabiyotlar ma’lumotlarining etarlicha bo‘lishiga qaramay, o‘tkir ichak infektsiyalari, ayniqsa yosh bolalarda, ko‘plab klinik va tashkiliy jihatlar hal qilinmagan. O‘tkir ichak infektsiyasida (O‘II) favqulodda vaziyatni davolash ko‘pincha og‘iz va tomir ichiga regidratatsiya yordamida turli darajadagi ekssikozni bartaraf etishgacha kamayadi.

Экстренные состояния интенсивной терапии при острых кишечных инфекциях у детей

Ключевые слова:
диарея,
инфекционные заболевания,
острые кишечные инфекции,
регидратация.

АННОТАЦИЯ

Несмотря на успехи, достигнутые в борьбе со многими инфекционными заболеваниями, проблема диареи в Узбекистане, как и во всем мире, остается актуальным. Медико-социальная значимость проблемы определяется не только значительной распространенностью заболевания, но и высокой распространенностью инфекционных заболеваний. Выявляются тяжелые сложные формы заболевания, особенно у детей раннего возраста. Кроме того, диарейные заболевания косвенно способствуют возникновению других инфекций, так как приводят к истощению и, как следствие, снижению сопротивляемости организма. Несмотря на наличие данных из литературы по изучению и лечению диареи, острых клинических инфекций, особенно у детей раннего возраста, многие клинические и организационные аспекты остаются нерешенными. При острой кишечной инфекции (ОКИ) неотложное лечение часто сводится к устранению высыхания различной степени с помощью пероральной и внутривенной регидратации.

GOAL

He will study the pathological conditions that occur with acute intestinal infec- tions and other pathological conditions that require intensive therapeutic measures. Research material and methods An analysis of 350 patients who were treated in the intensive care unit for acute respiratory infections for 5 years (2005–2010).

Patients treated in the intensive care unit amounted to 12.5 %, of all children with acute respiratory infections admitted to the hospital, most of them (89 %) were infants. Determining the indications for hospitalization in the intensive care unit, the following emergency conditions were distinguished in children with acute intestinal infections and, accordingly, differentiated therapeutic measures were carried out. 1. Intestinal toxicosis with exsiccosis II-III degree. This condition is common, in 42 % of cases, usually with acute respiratory infections, accompanied by watery diarrhea and repeated vomiting, that is, with escherichiosis, foodborne toxic infections. However, in infants, it can develop with a severe form of acute intestinal in – fections of any etiology. The main link in the disorders should be considered exico – sis with a loss of 5 to 15 % fluid with the development of hypokalemia and hypopro- teinemia. The latter are often detected after correction of exsiccosis and elimination of hemoconcentration. In patients up to a year of age, exicosis is mainly isotonic, a decrease in sodium is rare. Disturbances from the central nervous system, micro circulation and acid-base state are secondary. The basis of therapy in this condition is timely and adequate correction of water-electrolyte balance and hypoproteinemia with the help of infusion therapy, both on the first day of the patient's admission and for the entire period of continuing losses. To assess the adequacy of the treat- ment, a constant clinic laboratory monitoring is necessary. Informative laboratory indicators are the level of hematocrit and the concentration of electrolytes in plas- ma, primarily K + and Na +, as well as the level of total protein. As infusion agents, we used an isosmotic glucose-polyionic solution (contains 86 mmol / I sodium). Of the colloidal solutions in the acute phase, reopoliglukin is most suitable. Albumin so- lutions were used after dehydration was eliminated; their use as a starting solution is undesirable. The volume of infusion therapy depends on a number of factors: the age of the child. the degree of exicosis, the volume of ongoing losses with stool and vomiting, digestion, write and drink, etc. But the preparation of corrective programs and the use of standard solutions allows the doctor to quickly make the necessary calculations. Cocarboxylase, ATP, and drugs to improve microcirculation (trental, curangil) are also added to the infusion media. More than half of the children in this group can be treated without antibiotics, or receive them only by mouth. 2. Generalized forms of intestinal infections, septicemia, occurring with severe intoxication phenomena. Patients with these forms accounted for 33 % of all pa- tients in the intensive care unit, these conditions are most often observed with sal- monellosis, yersiniosis, and klebsiellosis. They are characterized by the presence of two or more lesions, of which pneumonia and acute otitis media are most common, pyelonephritis is rare and rarely – myocardit is. The severity of the condition of patients is explained mainly by bacterial intoxication; lethargy, refusal to eat and drink, fever, infrequent vomiting, enlargement of the liver and spleen, and intestinal paresis are noted. Sub compensated metabolic acidosis, hypokalemia, hypoproteinemia, changes in the blood formula, leukocyte index increased within 3-8units, intoxication are de- tected in the laboratory. For patients of this group, a quick etiological diagnosis with the help of a sero logical reaction and the correct selection of antibacterial drugs, a bacteriological study of the discharge from the nose, ears, urine and feces, with a determination of the sensitivity

of the allocated flora to antibiotics, are important. Such patient's car- ry out disintegration Dication-correcting infusion therapy with elements of paren- teral nutrition. The total calorie volume should be 100-110 kcal KG / CUT. Accord- ing to indications, immune globulin (intravenously), native (or frozen) plasma was used, heparin therapy was carried out at the rate of 150-250 units. heparin per kg of body weight; proteolysis inhibitors (contracal, gordox) were also used. Neurotoxi-cosis in our observations was observed in 7 % of patients. It manifests itself as a generalized reaction with hyperthermia, tachycardia, shortness of breath, anxiety, and clinically tonic convulsions are often noted. This condition was more often ob-served in severe forms of dysentery, with a combination of the development of viral (ARVI) and bacterial (intestinal) infection. It was also observed at a time when, against the background of a leaking intestinal infection, the child developed compli- cations in the form of acute otitis media, pneumonia, etc. Exicosis in such patients was usually not very pronounced, tissue turgor remained normal, a large fontanel was performed or swollen. Laboratory leukocytosis, an increase in leukocyte index intoxication, metabolic acidosis and compensatory hypocapnia were usually detected in the blood, a violation in the blood coagulation system was noted. Such conditions require the most urgent measures: they were the removal of seizures by intravenous administration of seduxen (0.5 mg / kg) and pipolfen (1-2 mg / kg). In severe cases, this was achieved by lowering the body temperature by physical and medical meth- ods. During seizures, lumbar puncture was done for medical and diagnostic purpos-es (therapeutic effect due to a decrease in cerebrospinal fluid pressure). Therapeutic measures were aimed at normalizing hemodynamics, preventing cere-braledema with the help of ganglion blockers, neuroplegic drugs, and corticosteroid hormones. With severe tachycardia, beta-blockers (obzidan) were used. The introduc-tion of this drug was carried out slowly, under the control of heart rate and even ECG. At the first stage of treatment, infusion media containing sodium were strictly limited. After eliminating the phenomena of neurotoxicosis, infusion therapy was carried out (if necessary) according to generally accepted principles of correction. Conclusions In addition to toxicosis and exicosis in severe acute intestinal infections in children, it is also necessary to bear in mind the development of shock, acute renal failure and the onset of atoxico-dystrophic state. Thus, a differentiated approach to the assessment of emergency conditions in children with acute renal failure and their adequate therapy can reduce mortality among resuscitation patients who re-ceivedacute intestinal infections.

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