not only the nervous system is depleted, symptoms of general somatic diseases are increasingly manifested with age. The research results revealed the characteristic signs of PBS in older dentists with extensive experience in the specialty, their psycho-emotional exhaustion, and physical and nervous overwork.

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EVALUATION OF SHORT-TERM OUTCOMES IN PRETERM INFANTS WITH NECROTIZING ENTEROCOLITIS

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ОЦЕНКА НЕПОСРЕДСТВЕННЫХ РЕЗУЛЬТАТОВ ЛЕЧЕНИЯ У НЕДОНОШЕННЫХ ДЕТЕЙ С НЕКРОТИЗИРУЮЩИМ ЭНТЕРОКОЛИТОМ

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The work assessed the impact of the principles of open resuscitation on the results of the treatment of premature infants with NEC. The type of organization of the ICU (open or limited access) did not affect the daily and 7-day mortality. The previous severity of the NEC condition and the nature of the surgical intervention were of primary importance. Significant

differences were noted in terms of the duration of administration of systemic analgesics (2.3+1.1 and 6.8+1.2 days, p<0.05) and the timing of the start of enteral nutrition (3.7+1.5 and 6.7+2.2 days, p<0.05). With unrestricted access of mothers of newborns with NEC to ICU, the microbial spectrum in cultures from different loci was significantly richer. However, further research is needed to explore this approach in preterm infants with NEC.

Keywords: preterm infants, necrotizing enterocolitis, open visitation, outcomes

В работе проведена оценка влияния принципов открытой реанимации на результаты лечения недоношенных детей с некротизирующим энтероколитом (НЭК). Тип организации реанимационного отделения (открытый или ограниченный доступ) не оказывал влияния на досуточную и 7-суточную летальность. Основное значение имела предшествующая тяжесть состояния НЭК и характер хирургического вмешательства. Значимые различия были отмечены в длительности назначения системных анальгетиков (2,3±1,1 и 6,8±1,2 суток, p<0,05) и сроков начала проведения энтерального питания (3,7+1,5 и 6,7+2,2 суток, p<0,05). При неограниченном доступе матерей к новорожденным детям с НЭК в реанимационном отделении микробный спектр при высевах из различных локусов был существенно богаче. Вместе с тем требуются дополнительные исследования по дальнейшему изучению данного подхода среди недоношенных новорожденных с НЭК.

Ключевые слова: недоношенные дети, некротизирующий энтероколит, открытая реанимация, результаты

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GIT – gastrointestinal tract
ICU – intensive care unit
NEC – necrotizing enterocolitis

Necrotizing enterocolitis (NEC) remains the most common cause of disability and death in children. To date, the incidence of NEC is about 6.3 % (2.5:1000) of newborns of the total number of children admitted to neonatal intensive care units (ICU) [1–3]. The principle of open resuscitation is to organize the child's stay with parents in the ICU and the professional activities of the department's staff, which provides for a family-oriented approach to the treatment and care of patients [3]. As you know, free access to the ICU has many advantages: psychological comfort of family members, commitment to ongoing treatment, best contact with medical personnel, and reduction of complaints from relatives [4, 5]. However, the impact of such a system on NEC for premature infants in ICU has not been sufficiently studied.

The work aimed to evaluate compliance with the principles of open resuscitation on the results of treatment of premature infants with NEC.

Material and Methods. Between 2017 and 2022, under our supervision, there were 41 premature infants with NEC stage IIB–IIIB. There were 24 (58.5 %) boys, girls – 17 (41.5 %). Gestational age ranged from 25 to 38 weeks (mean 29 weeks). Body weight went from 456 to 1476 grams (average weight – 975 grams). We formed two groups: group I – 18 (43.9 %) newborns, who in the postoperative period in the ICU adhered to the principles of open resuscitation [4]; group II – 23 (53.1 %) children who received conventional treatment.

Surgical treatment of children with NEC was carried out in several stages: the first stage was laparotomy, revision of the abdominal cavity, and estoma; the second stage was a reconstructive surgery with anastomosis (on average, at 23.2±1.6 days). The reconstructive stage was accompanied by creating an enteroanastomosis in 17 (41.4 %) patients and a T-shaped anastomosis – in 24 (58.6 %). At the same time, the anastomosis site was additionally treated with its own platelet-rich plasma.

In the study groups, the duration of extubation and the possibility of withdrawal of analgesic therapy, the beginning of intestinal nutrition, as well as microflora diversity determined by standard microbiological screening were assessed. Statistical processing was performed using Statistica 10.0 (StatSoft Inc., USA) software package. Statistical processing was carried out using Fisher's exact test. The criterion for statistically significant differences between the groups was the value of the Fisher criterion less than 0.05.

Results and Discussion. Analyzing the data obtained, it becomes clear that the type of organization of the ICU (open or limited access) did not affect the one daily (1 (5.6 %) and 2 (8.7 %), respectively) and seven daily (1 (5.6 %) %) and 3 (13.0 %), respectively) mortality. The previous severity of the NEC condition and the nature of the surgical intervention were of primary importance.

In contrast to mortality rates, we found significant differences between the models for organizing the work of the ICU and the quality of accompanying therapy. Thus, systemic inflammatory response syndrome developed much less frequently (p<0.05) in newborns of Group 1, than in Group 2 (2 (11.1 %) and 4 (17.4 %), respectively). Similar significant differences were noted between study groups of preterm infants with the open resuscitation and the traditional approach in such important indicators as the duration of use of systemic analgesics (2.3+1.1 and 6.8+1.2 days, p<0.05) and the timing of the start of enteral nutrition (3.7+1.5 and 6.7+2.2 days, p<0.05). However, the most critical indicators for such patients, such as the duration of the arti-

ficial respiration and the length of stay in the ICU, do not differ (p>0.05).

Remarkable data were obtained from the analysis of the microbiological landscape of the patients with the research team. With unfettered access by newborn mothers to ICU, the microbial spectrum in different loci cultures was much more affluent. This is due to the use of various technologies in this method of work organization. The predominance of St. epidermidis is due to the use of tactile contact with impact elements, the kangaroo technique, and finger training.

In the preterm infants from group II, the microbial spectrum was significantly narrower; Kl. pneumonia and Acinetobacter baumannii predominate as pathogens. The risk of contamination with nosocomial flora was significantly higher in Group 2 compared to Group 1 (OR 2.65:10.3 at p=0.0231 and 1.65:8.7 at p=0.0241, respectively).

Conclusion. The data thus obtained significantly increases our understanding of the importance of open resuscitation for improving the quality of care for premature infants with NEC. Creativity and innovation will enable emergency physicians to facilitate family visits in the ICU. However, further multicentric research is required.

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