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BENEFITS OF GENERAL INHALATION ANESTHESIA IN PEDIATRIC OPHTHALMOLOGY

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Abstract:

A clinical analysis of 34 anesthesiological guidelines was carried out in children with residual encephalopathy (RE) and ophthalmosurgical pathology. The frequency of cognitive dysfunctions in children of different ages with convulsion reactions and manifestations of hypertension syndrome were studied in a comparative way. More manifestations of postoperative cognitive dysfunctions were reported in children under 6 years of age.The use of isoflurane as the main anesthetic during ophthalmological-operations in children with RE is modern it is considered one of the effective methods in anesthesiology.

Keywords: children, ophthalmology, anesthesia, isoflurane, encephalopathy.

Introduction

Significance. Pediatric residual encephalopathy (RE) occupies one of the leading places in the structure of diseases of the nervous system. Children RE are a group of diseases that involve a large number of diseases that are caused by trauma or underdevelopment of the brain during pregnancy and childbirth. Clinical manifestations of RE are determined by changes in the functioning of the developing brain- [5].

The development of RE is caused by various other negative factors, such as the intrauterine period of the fetus, the period of childbirth and early postpartum (hypoxia, infection, injury) and others. The frequency of RE is 2-5 cases per 1000 newborns. Children with RE in hyperthyroidism and amblyopia have the highest incidence of visual analyzer damage. The difficulty of psychological communication in children with RE, the presence of intellectual insufficiency makes it difficult for them to correct treatment. This gives the doctors with them creates additional difficulties in Operation [1].

Based on the above, the doctor is faced with a much more complex situation in the Prevention of the anesthesiologic-manual method by anesthesiologists and possible complications at each stage of

anesthesia. First of all, this is due to the negative impact of drugs for general anesthesia on the central nervous system with impaired cognitive activity and lifestyle. In this regard, the problem of complications caused by general anesthesia remains relevant in anesthesia and intensive care [2].

Objective: to study the clinical specifics of inhalational anesthesia with Isoflurane in different age groups of children with RE in Ophthalmic practice.

Material and methods. In the Samarkand regional multidisciplinary children's Medical Center, a clinical analysis of anesthesiologic practice in 34 children with various ophthalmosurgical and re pathologies was carried out. Their age was 17 years from 1.5 months. All operations 2018 - Between 2023. All these children were conditionally divided into two groups: from 6 months to 6 years old (19 children) and from 7 to 17 years old (15 children). In both groups, General inhalation was performed by the endotracheal method of anesthesia. The control of the adequacy of anesthesia and artificial ventilation of the lungs was carried out according to clinical signs and on the basis of constant monitoring data. The latter lists its parameters pulseoximeter (SpO2, heart rate), non-invasive measurement of blood pressure - (Sab, DAB, wrap), ventilation mode, capnography included. The frequency of cognitive dysfunctions, thalvasa reactions and manifestations of hypertension syndrome have been studied in a comparative way.

Results and Discussion. Standard premedication was used, which was accepted in all patients. Due to this, premedication in this order since there is not always an adequate sedation condition in the child, we have used the following premedication, which allows young children to perform venous puncture in the operating room. It was through the face mask that the first ingestion of isoflurane for less than two minutes and standard premedication were used. In all cases, a good result was achieved in induction with isooflurane using propofol (diprivan) or through a face mask.The use of this manual allowed the necessary depth and smooth course of anesthesia at all stages of surgery. - But, in the stage of awakening among the first group, postoperative cognitive dysfunction (OKKD) was much more common.They were expressed in 30% of cases in aggressive behavior, in deorientation in place and time, in disorders of behavioral reactions. The duration of such reactions in young group children ranged from 30 minutes to 2 hours. Cognitive impairment also occurred in the second group, but accounted for about 5% of cases. The difference in time duration and low intensity showed an average of 15 - 60 Minutes. According to the literature, the use of drugs such as ketamine, etomidate can lead to movement reactions, cramps, hypertensive syndrome, laryngospasm, vomiting and a relative increase in intraocular pressure, as well as an extension of the Renaissance [4,6].

In contrast, the use of Isoflurane as a primary anesthetic in children with RE has made it possible to significantly reduce all negative manifestations, as our experience has shown. Hypertension syndrome or talvasa reactions-manifestations were not observed in any of the groups.

Conclusions:

1. The implementation of an anesthesiological manual using isoflurane has shown a high degree of anaesthesia achieved and safety in the implementation of ophthalmic surgical practice in both age groups of children with RE.
2. In the early postoperative period, clinical manifestations of Ockd were delayed in the younger age group.
3. The high frequency and degree of manifestation of OKKD in the first group, we think,first of all, the initially unfavourable psycho of children-with emotional and neurological status, secondly, it can be associated with the predominance of this group in numbers (in the first group, 18 children from 6 months to 6 years old, and in the second Group, 16 children from 7-17 years old).

4. Nevertheless, in our opinion, it is recommended to use isoflurane as the main anesthetic in the optimal Manual of modern anesthesia-ophthalmosurgery and pediatric surgery in general-in children with RE.This allows all-negative reactions typical of other anesthetics to be reduced during and after surgery.

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