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ANESTHESIA AND LEVELS OF GLUCOSE, LACTATE, CORTISOL IN PLASMA IN OPHTHALMIC SURGERY IN CHILDREN

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Operations on the eyeball and the auxiliary apparatus of the eye, as well as any intervention in the body, lead to a stress reaction in the body with a change in the function of all organs and systems in general, which has been shown in numerous studies. The task of anesthesia is to protect the body in response to stress.

Material & Methods: 100 patients aged from 4 to 18 years, who were evaluated with glucose, lactate, and cortisol at three stages of operation in 5 groups with different methods of anesthesia, were studied. Patients were randomized by 20 people. Maintenance of anesthesia with spontaneous breathing through the laryngeal mask was carried out in the following groups: inhalation of sevoflurane in an oxygen-air mixture with an O₂ content of 40%, as well as intravenous administration of a propofol solution at a dose of 2 mg/kg immediately after induction and in groups; 1) the anesthetic concentration of 1.0 MAC (minimum alveolar concentration); regional anesthesia (RA): block van lint and infraorbital anesthesia; 2) the anesthetic concentration to 1.5 MAC; intravenously within 10 minutes after induction of anesthesia paracetamol solution at a dose of 15 mg/kg; 3) anesthetic concentrations of 0.7- 0.9 MAC; RA: van lint block and the wing-palatal anesthesia (palatal access); 4) anesthetic concentration 0.7-0.9 MAC; RA: block van lint, intraorbitally anesthesia and wing-palatal anesthesia; 5) anaesthetic concentrations of 0.7-0.9 MAC; RA: van lint block and retro bulbar anesthesia.

Research result: Despite the fact that in a number of cases at the study stages there were sufficient changes in the estimated values, the values of which were within the WHO reference values, all variants of anesthesia allowed to provide a high degree of anesthetic protection in ophthalmic surgical interventions and can be recommended for routine practical application

Biography

Korobova Lyudmila Sergeevna is a Doctor (Anesthesiologist) of the highest qualification category of the Department of anesthesiology and intensive care. She is an applicant for the Degree of candidate of Medical Sciences. She has more than five publications and a patent for the method of Anesthesia in Ophthalmic Surgery in children.

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