

Anesthesia and levels of glucose, lactate, cortisol in plasma in ophthalmic surgery in children.

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Abstract

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 and methods

100 patients aged from 4 to 18 years, who were evaluated with glucose, lactate, 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; 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: the anesthetic concentrations of 0.7 - 0.9 MAC; RA: van lint block and the wing-palatal anesthesia (palatal access); 4: the anesthetic concentration 0,7 - 0,9 MAC; RA: block van lint, intraorbitally anesthesia and wing-palatal anesthesia; 5: the anaesthetic concentrations of 0.7-0.9 MAC; RA: van lint block and retrobulbar anesthesia.

Research result

Despite the fact that in a number of cases were observed at the study stages sufficient changes in the estimated indicators, the values of which were within the framework of 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 use.

Recent Publication

1. Korobova LS, Arestova ES, Poduskov EV, Legostaeva OA, Gorbunova ED (2014) Multimodal anesthesia in the plasty of the orbital wall of children. Materials I Russian Congress with international participation "Proliferative syndrome in biology and medicine.": 132-136.
2. Korobova LS, Poduskov EV, Legostaeva OA, Milashchenko TA, Erashev MA (2015) The experience of using wing-palatal anesthesia in osteoplastic operations in ophthalmic surgery in children. Russian Pediatric Ophthalmology, №3:29-32.
3. Korobova LS, Balashova LM (2016) Anesthesiologic support of surgical interventions in ophthalmic surgery in children. II All-Russian Congress with international participation "Proliferative Syndrome in Biology and Medicine". :183-186.
4. Korobova LS, Kravchuk SV, Glazunov AA, Sparyshkin YA, Gorbunova ED, Zakharchenko AB (2017) Infraorbital anesthesia, as a component of combined anesthesia in the surgical correction of strabismus in children. Pediatrics them. GN. Speransky 96/1:211-213.
5. Korobova LS, Lazarev VV, Balashova LM. (2018) Effectiveness of rules of a dial infraorbitale for regional anesthesia in ophthalmic surgery in children. Proceedings of the XIX session of MEAR.:71-72.



Biography

Korobova Lyudmila Sergeevna doctor anesthesiologist of the department of anesthesiology and intensive care, a doctor of the highest qualification category.

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