

Optimization Of Anesthesia During Simultaneous Operations

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Abstract: This article discusses reliable anesthesia in simultaneous operations. - one of the most important links in the treatment of surgical patients, the severity of surgical stress, methods of regional anesthesia, hypnosis component, artificial ventilation of the lungs, the main function of accompanying surgical anesthesia, almost all common anesthetics and opioids negatively affect on cognitive and psychomotor functions, Application of EA in combination with general onesthesia

Key words: surgical stress, complications, hypnotic component, anesthetics and opioids, anesthesia, hypnosis component, epidural analgesia .

Actuality:

In the present time, an increasing number of patients surgical profile, with multiple competing diseases that require active surgical tactics. One of the promising directions for increasing the efficiency of surgical treatment of patients with competing pathology of the abdominal cavity and small pelvis, as well as in patients with a locally advanced pathological process with multi-organ lesions, is the widespread introduction of simultaneous and combined operations into practice . Even with a high level of anesthetic and intensive care services, abdominal surgery in modern conditions, such interventions are not included in everyday surgical practice. Meanwhile , the proportion of patients requiring such operations may be 20-30% of the total volume of patients requiring surgical treatment. Over the past ten years in our country, the stress to the problem of simultaneous and combined operations in thoracic surgery has been steadily increasing . This is due, firstly, to the increase in the number of patients with multi-organ pathology, and secondly, to the introduction of the concept of personalized medicine into Russian healthcare , which provides for an individual approach to the treatment of each patient. Some decrease in interest in simultaneous operations in recent years (judging by the number of publications) may be due to several reasons. In the 80s – 90s of the twentieth century, the increase in the number of such operations was associated with the expansion of the range of surgical interventions and the achievements of anesthesiology and resuscitation. At present, as a result of "point" specialization (cardiac surgery, coloproctology, endocrine surgery, etc.) , the number of surgeons who have mastered combined manipulations on various organs has sharply decreased . On the other hand, the number of patients with combined pathology is increasing, mainly due to elderly and senile patients.

Purpose of the work: To study the effectiveness of combined anesthesia in simultaneous operations on the abdominal organs in patients with arterial hypertension.

Research objectives: 1. Study of hemodynamics, respiration and hormonal parameters in the perioperative period in patients who underwent simultaneous surgery.

2. To study the effectiveness of the use of anesthetics in the context of total intravenous anesthesia and artificial ventilation of the lungs with simultaneous surgery.
3. To study and evaluate the effectiveness of multicomponent general anesthesia and its combination with epidural anesthesia.

Materials and methods of research:

We examined 106 surgical patients aged 45 to 72 years (average 54.6 + - 6.6): men - 45-42.5%, women - 61-57.5%. The patients differed in the nature of the surgery. Patients of the main group (76 people) underwent simultaneous operations using multicomponent general and epidural anesthesia (EA). Puncture and catheterization of the epidural space were performed 30-40 minutes after standard premedication according to the general rules. The puncture site was selected taking into account the segmental zones of the operated elements. Local isobaric anesthetic longocaine was administered at the rate of 0.5% -1.5 mg / kg / h. General intravenous anesthesia was administered to 30 patients in the control group in the same condition on the background of mechanical ventilation. Ketamine 5-6 mg / kg / h as a general anesthetic. Thiopental sodium 3-5 mg / kg / h, relaxant arduan was administered at doses of 0.04-0.06 mg / kg / h. In dynamics, general clinical, biochemical analyzes, ECHO-KG, heart rate, spirometry, pulse oximetry (SpO₂) were determined. early postoperative period and after 24 hours. The effectiveness of anesthesia was determined on the basis of generally accepted indicators: clinic of anesthesia, hemodynamics, glycemic value. In the postoperative period, it was assessed using a visual analogue scale (VAS).

Results and discussion:

The risk of anesthesia and surgery was assessed by ASA as grade II-III. Patients in the study group showed a 15-20% decrease in blood pressure and an increase in heart rate of 4-5% after EA. SpO₂ remained in the range of 96-98%. Due to the use of EA as a component of the anesthetic aid, the consumption of fentanyl in the main group decreased by 8-10 times compared with the control group of patients. Mean blood pressure remained stable at all stages of the operation. With stabilization of hemodynamics after the restoration of adequate spontaneous breathing, the possibility for extubation occurred earlier than in the control group. Patients of the main group were injected with 0.5% -5 ml (25 mg) of longocaine solution through an epidural catheter every 6-8 hours and once 5 mg morphine as postoperative pain relief. Discomfort in the postoperative period was noted by 12 patients in the control group; severe pain syndrome, intestinal paresis, nausea were observed, additional anesthesia was required. The level of analgesia according to the VAS was 0-1 in the main group and 3-4 in the control group.

Conclusions:

The use of EA in combination with general onesthesia in the perioperative period has shown its high efficiency and made it possible to reduce the use of anesthetics, analgesics and muscle relaxants during surgery. EA Application for postoperative analgesia caused a decrease in the frequency and the risk of complications associated with systemic administration of opioids and postoperative hypokinesia, improved the quality of postoperative rehabilitation and, consequently, reduce the time EA gospitalizatsii.Primenenie for postoperative analgesia has shown to be highly effective and possible to reduce the use of opioids in the postoperative period.

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