AN-1401-005
ANAESTHESIA FOR PATIENTS WITH OBSTRUCTIVE AIRWAY DISEASES
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Abstract: Obstructive lung diseases like asthma or chronic obstructive lung diseases have a high prevalence and are one of the four most frequent causes of death. Obstructive lung diseases can be significantly influenced by the choice of anesthetic techniques and anesthetic agents. Basically, the severity of the COPD and the degree of bronchial hyperreactivity will determine the perioperative anesthetic risk. This risk has to be assessed by a thorough preoperative evaluation and will give the rationale on which to decide for the adequate anesthetic technique. In particular, airway instrumentation can cause severe reflex bronchoconstriction. The use of regional anaesthesia alone or in combination with general anaesthesia can help to avoid airway irritation and leads to reduced postoperative complications. Prophylactic antiobstructive treatment, volatile anesthetics, propofol, opioids, and an adequate choice of muscle relaxants minimize the anesthetic risk, when general anesthesia is required. In case, despite all precautions intra-operative bronchospasm occurs, deepening of anaesthesia, repeated administration of ß2-adrenergetic agents and parasympatholytics, and a single systemic dose of corticosteroids represent the main treatment options.
Key words: obstructive lung disease, anaesthetic techniques, anaesthetic risk, regional anaesthesia

AN-1401-011
PREDICTIVE VALUE OF BODY MASS INDEX FOR PERIOPERATIVE HYPERGLYCEMIA OCCURRENCE IN CARDIO-SURGICAL PATIENTS WITHOUT DIABETES MELLITUS
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Abstract: Purpose of the study was to assess a predictive value of body mass index for perioperative hyperglycemia occurrence in cardio-surgical patients without a diabetes mellitus. Materials and Methods: Retrospective analysis of glycemic profile, frequency and level of perioperative hyperglycemia was performed. 120 patients without a diabetes mellitus, undergoing elective cardiac surgeries with cardiopulmonary bypass were included in the study. All patients were divided into three groups. Group-1 included patients with normal body weight (body mass index (BMI) < 25), Group-2 – patients with increased body weight (BMI 25-29.9), Group-3 – patients with obesity (BMI > 30). Results: Elective cardiac surgeries with artificial circulation accompanied with episodes of hyperglycemia. Hyperglycemia occurrence did not have relation with initial glycemic profile of the patients. Glycemia level increased during surgery and the highest levels of both glycemia increasing of hyperglycemia frequency were fixed during cardiopulmonary bypass and postperfusion period. Increased body weight and obesity are predisposing causes of perioperative hyperglycemia.
Key words: hyperglycemia, cardiac surgery, cardiopulmonary bypass, body mass index, obesity

AN-1401-014
WHOLE BLOOD COAGULATION THROMBOELASTOMETRIC PROFILES AFTER CARDIAC SURGERY
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Abstract: Objective: To evaluate patients’ hemostasis after cardiac surgery using thromboelastometric and impedance aggregometry. Materials and Methods: 66 patients were examined intraoperatively. Comparison group included 45 blood donors. Hemostasis was tested for thromboelastometric Rotem Gamma with the assessment of external (exTem) and internal (inTem) pathways of coagulation tests performed detection of heparin (hepTem) and cytochalasin-D-inactivation of platelets (fibTem) to assess the level of fibrinogen. Collagen-induced platelet aggregation was determined in an aggregometer CHRONO-LOG (USA). Results: Significant deviations of the parameters of hemostasis were detected in 52 of the 66 studied patients.
In group-1 (23 patients) revealed a residual effect of heparin. The effect manifested prolongation CT (clotting time) in Tem to an average of 241 ± 15 s, compared with CT hepTem - 181 ± 7. Patients in this group were in need of additional administration of protamine sulfate. Postoperative bleeding and re sternotomy was observed in 3 patients of group-1. In group-2 (25 patients) CT inTem was 216 ± 21 with significantly fewer CT hepTem (272 ± 26). The data indicated excess of protamine sulfate. Platelets aggregation decreased compared to the norm. According to the obtained results, the addition of protamine sulfate is not required, however, in 7 cases the protamine sulfate was administered in a dose of 8.9 ± 0.8 mg in 6 cases re sternotomyi required. In the third group (n = 6) bleeding was observed in 4 patients. The difference in CT hepCT was significant. Significant variations were revealed in the tests of the activity of the extrinsic pathway of coagulation and cytochalasin-D-induced inactivation of platelets: exMCF 42 ± 2 mm (normal 57 ± 15 mm), fibMCF 5.0 ± 0.3 mm (norm 12.8 ± 4.3 mm). The concentration of platelets and their aggregation activity was sharply reduced. Disorders of hemostasis in the third group, designated as dilution coagulopathy. Conclusion. Turning thromboelastometric and impedance aggregometry in the study of the coagulation profile of patients undergoing cardiac surgery in postperfusion period brings valuable information and allows a differentiated treatment of hemostasis disorders.

Key words: cardiopulmonary bypass, thromboelastometric residual effect of heparin, excess of protamine sulfate, dilution coagulopathy

AN-1401-018

Epidural Analgesia In The First Stage Of Labor – Is There An Alternative?

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Abstract: Objective: To evaluate the influence of epidural analgesia and lumbar paravertebral block on the structure of the delivery, the fetus and newborn, and the quality and duration of analgesia. Materials and Methods: Patients were randomized into three groups, 30 patients in each group. In the group-1 patients recived epidural analgesia (EA), in the group-2 – paravertebral block (PVB), in the group-3 patients refused pain relief in labor. Pain was assessed by VAS. Length of the first and second stage of labor, the impact on the CTG and fetal blood gases from the umbilical cord of newborns in the first minute of life were fixed. Data were analyzed by Mann-Whitney U test and presented as median (25th-75th percentiles). Results: In both groups of patients in pain reduction was significant adjustment contractions and after 1 hour was 94.5% in EA, and PVB group - 78.7% of the initial values. Under EA opening cervix was statistically significantly greater than in the PVB (192.5 (145, 302) vs 172.5 (112, 210) min) p <0.05. Second stage of labor was also shorter in the PVB than in the EA (30.4 (10.2, 46.5) vs 59.8 (40.2, 81.5) min), in the control group it was - 40.6 (21.3, 55.4) min, p <0.05. PVB was observed in the group of more stable hemodynamics than in the EA for the entire period of observation. There were no adverse effects on the fetus and the newborn in the arms of the study. Conclusion: The proposed lumbar paravertebral block is simple to perform, is effective in reducing pain in the first stage of labor, does not require continuous hemodynamic monitoring may be used for the treatment of birthdystocia and is a good alternative when the use of epidural analgesia during labor is limited.

Key words: paravertebral block, epidural analgesia, structure of labor.

AN-1401-023

Effect Of Preoperative Infusion Volume On Frequency Of Intraoperative Nausea And Vomiting After Spinal Anaesthesia In Parturient Undergone Caesarian Operation (Pilot Study)

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Abstract: Purpose of the study was to define a prophylactic effect of different preload volumes on the rate of intraoperative nausea and vomiting (IONV) as a complication due to spinal anaesthesia (SA) during caesarian operation (SO) in parturient. Data for analysis was collected during clinical observational multi-center research included several medical centers. Statistics involved originally developed method allowed to analyze relative risk changing along the entire interval of all applied preload volumes. The results suppose that preload is effective method of IONV prophylactics in parturient during SO under SA if only infused preload volumes do not break specially determined limits of effective interval. If preload volume value is out
of this range then preinfusion may lead to increasing risk of IONV occurrence.

Key words: caesarian operation, spinal anaesthesia, intraoperative nausea and vomiting, preload

AN-1401-026
PROBLEM OF TREATMENT FOR PYO-INFLAMMATORY COMPLICATIONS CAUSED BY ACINETOBACTER

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Abstract: The article deals with analysis of a detection frequency and antibacterial treatment resistance of Acinetobacter spp.of different species affiliation. Strains of bacteria detected in patients with pyo-inflammatory complications after surgeries (period from 2010 to 2012) were involved in the study. 137 strains of Acinetobacter spp. were detected and studied. Fraction of Acinetobacter spp. in 2010, 2011 and 2012 was 2.3, 3 and 3.4% respectively. Fraction of P.aeruginosain all non-fermentative Gram-negative bacteria (NFGNB) decreased by 120% and fraction ofAcinetobacter spp. increased by 200-250%. Acinetobacter spp.detection frequency was not significantly changed in the period from 2006 to 2012. However the fraction of Acinetobacter spp. in NFGNB increased by 150% and was 29% in 2012. Detection frequency of A.baumanii sharply increased in 2012. A study of antibacterial treatment resistance of Acinetobacter spp. (10 antibacterial medicines) showed that Polymyxin B and E (Colistin) was the most effective medicine for A.baumanii and A.calcoaceticus infection. 85-95% of Acinetobacter spp.strains kept sensitivity to this antibacterial medicine. 66-88.9% of A.baumanii strains, 66.7-81.8% of A. alcoaceticus and 66.6% of other Acinetobacter spp.weresensitive to Tigecycline. Dioxide effectiveness was close to Tigecycline in 66.7-80% of A.baumanii strains. 85-100% of A.calcoaceticus strains were sensitive to Dioxide. There is a trend of decreasing of A.baumanii sensitivity to Carbapenems by 200%. Fraction of strains sensitive to Meropenem and Imipenem in 2012 was 21.4% and 16.7% respectively. All studied strains of A.lwoffii and A.haemolyticus kept sensitivity to Carbapenems. In 2012 23.8% of A.baumanii and 45.5% of unidentified Acinetobacter strains Gentamicin was not effective against A.lwoffii and A.haemolyticus. Thus Polymyxins (in monotherapy or in combination with glycopeptides), Dioxide and Tigecycline in combination with Carbapenems or Ceftazidime/Subactam are to be drugs of choice in treatment for pyo-inflammatory complications caused by Acinetobacter spp.

Key words: nosocomial infections, acinetobacter spp., antibacterial treatment resistance

AN-1401-033
EVALUATION OF HAEMOSTASIS AND ENDOTHELIAL DYSFUNCTION IN PATIENT WITH COMMUNITY-ACQUIRED PNEUMONIA


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Abstract: The article deals with a study of hemostasis (D-dimer, soluble fibrin-monomer complex, time fibrin self-assemblance, antitrombin III, fibrinogen), endothelial dysfunction (f. Willebrand and acitivity of plasminogen activators inhibitor type 1) and CRP in 61 patients with CAP in the day of admission and before discharge from hospital. 17 patients had a severe pneumonia, 6 people died. The levels of all markers (except AT-3) were increased on admission and were reduced before discharge, but within the normal range to include only FW, CRP and time fibrin self-assemblance. DD, CRP and PAI-1 were dependent on the severity of the CAP, severity of SIRS and extent of the inflammatory process. The risk of severe pneumonia increased with the level of D-dimer in the onset of the disease more than 2.0 mg mL-1 (OR = 21.8, 95% CI: 3.09-154.8), with the results of TP-test less than 0.5 (RR = 2.68, 95% CI: 1.23-5.84), with CRP greater than 200 mg l-1 (OR = 4.6, 95% CI: 1.87-11.45) and PAI-1 activity more than 30 U l-1 (OR = 2.05, 95% CI: 0.88-4.74). Rg-CAP outcomes best reflect the level of DD, measured prior to discharge patients.

Key words: community-acquired pneumonia; hemostasis, endothelial dysfunction
PROPHYLACTICS OF INTRAOPERATIVE NAUSEA, VOMITING AND ABDOMINAL DISCOMFORT DUE TO SPINAL ANAESTHESIA FOR CAESARIAN OPERATION

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Abstract: The article deals with data of comparison of different antiemetic drugs used for prophylactics of intraoperative nausea and vomiting (IONV) during caesarian operation. 150 women included in the study were divided into three groups. Patients of the group-1 (80 women) received dproperidol 0.08-0.12 mg kg⁻¹ intravenously and atropine 0.006-0.009 mg kg⁻¹. Patients of the group-2 (50 women) received dexamethasone 0.04-0.1 mg kg⁻¹ intravenously. In the group-3 (20 women) patients received methoklopramide 0.1-0.2 mg kg⁻¹ intravenously. Intravenous administration of low doses of atropine and dpropéridol provides the most effective prophylactics of IONV.

Key words: caesarian operation, spinal anaesthesia, intraoperative nausea and vomiting

POSTOPERATIVE ANALGESIA WITH NEFOPAM AND NON-STEROIDAL ANTI-INFLAMMATORY DRUGS IN PATIENTS AFTER SURGERY FOR TUMORS OF HEAD AND NECK

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Abstract: Materials and Methods: 83 adult patients included in the study were divided into two groups. Patients of the group-1 (n= 49) had medium level of pain after cancer head and neck surgery. Patients of the group-2 (n= 34) had severe pain. Three first postoperative days their post-operative multimodal analgesia started with tenoxicam 20 mg i.m. after induction of anesthesia, then every 24 hour (58 patients). 25 patients got ketoprofen 100 mg i.m. every 8-12 hours instead of tenoxicam. All patients had nefopam 30 mg i.m. 30 min prior the end of surgery procedure, and every 8 hours afterwards. 7 patients of the group-1 had more than 4 pain scores (day 1), 4 patients - at the day 2. They received tramadol or paracetamol additionally. 7 patients (group-2) also had up to 5 pain scores on the day 1, 5 patients had 4 pain scores on the day 2, and 3 patients 4 pain scores on the day 3. All that patients received additional analgesia with tramadol or trimiperidine once a day. 8.4% of patients suffered from adverse reactions (tachycardia, PONV, and sweating). Conclusion: this method of multimodal postoperative analgesia is very simple and fairly efficient.

Key words: nefopam, tenoxicam, ketoprofen, multimodal postoperative analgesia, head and neck cancer surgery

OXYGEN CONSUMPTION IN THE LUNGS AND SYSTEMIC CIRCULATION – DIFFERENT METHODS OF MEASUREMENT OF ONE DATA OR DIFFERENT DATA?

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Abstract: The article deals with calculation of oxygen consumption in the lungs by means of breathing gas mixture analysis and in parallel – in the systemic circulation by reverse Fick method; 32 paired measurements were performed in 8 patients after cardiac surgery with cardiopulmonary bypass. The mean pulmonary oxygen consumption was higher than the same value calculated by the reverse Fick principle – 148.4±39.9 ml·min⁻¹·m⁻² and 120±35.1 ml·min⁻¹·m⁻², respectively, the mean difference between two methods was 28.4±18.4 ml·min⁻¹·m⁻². However, in two observations the interrelation was inversed. While analyzing physiological and methodological reasons for these differences, the authors concluded that, despite both methods can be used in monitoring systemic oxygen transport in the critically ill, they are not interchangeable, and valuable additional data could be derived from fast changes in lungs oxygen uptake.

Key words: oxygen consumption, reverse Fick principle, ventilation–perfusion relationship
APPLICATION OF SHOT-LATENCY SOMATO-SENSORY EVOKED POTENTIALS FOR EVALUATION OF SWALLOWING DISORDERS IN EARLY PERIOD AFTER POSTERIOR FOSSA SURGERY


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Abstract: Main tasks of early postoperative period in patients after posterior fossa surgery are the timely and safe weaning from mechanical ventilation and extubation. For clinical assessment of the hypopharynx function we use an algorithm developed in the intensive care unit (ICU) of the Burdenko Scientific Research Institute of Neurosurgery. Disadvantages of the clinical test for assessment of patient's readiness for extubation are subjectivity and impossibility to use it in conditions of even superficial sedation. Shot-latency somato-sensory evoked potentials (SSEP) can be applied in conditions of sedation and objectify the brain stem deficit. The goal of the study was to define the changes of cortical SSEP in patients with disorders of swallowing after posterior fossa surgery. To assess the swallowing disorders we used a scale of swallowing disorders in intubated patients with brain stem damage. We compared results of cortical SSEP, test of swallowing disorders in intubated patients and clinical results of extubation. 17 patients with tumors of posterior fossa were included in the study. All patients were divided into two groups depending on duration of mechanical ventilation. Patients of the group-1 were successfully extubated in 4.5 hours. Patients of the group-2 were mechanically ventilated more than 15 hours because of impossibility to pass the test of readiness for extubation. Results: Central conduction time symmetry index after the surgery was lower in the group-1 than in group-2. There was inverse correlation between amplitude of cortical response N20 and time from the patient's admission to the ICU until the moment of extubation. Conclusions: asymmetry of central conduction time and decreasing of N20 amplitude can be used as additional predictor of swallowing disorder.

Key words: somato-sensory evoked potentials, SSEP, central conduction time, swallowing disorder, posterior fossa, neuro-resuscitation

EVALUATION OF THE LUNG DISEASE SEVERITY IN INFANTS WITH RESPIRATORY DISTRESS SYNDROME

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Abstract: Optimization of respiratory support and prevention of ventilator-associate lung injure are the most important problems of neonatal resuscitation and intensive care. The aim of the study: To improve the results of intensive care for respiratory failure in preterm infants by optimizing respiratory support on the basis of the analysis of the biomechanical characteristics of the lungs and blood gas. Materials and Methods: The study included 138 infants with birth weight 1500g (1300-1740g) and a gestational age of 30.5 (29-32) weeks in need of mechanical ventilation. Apgar score at one minute was equal to 5.0 (4.0-6.0) points, and the fifth - 7.0 (6.0-7.0) points. Biomechanical properties of light investigated the dynamic lung compliance, aerodynamic upper airway resistance, the coefficient of hyperextension, the time constant and the coefficient of RVR, reflecting the patient’s spontaneous breathing pattern were evaluated. Results: It was found that the most significant biomechanical characteristics of lungs, reflecting the severity of the respiratory failure are the dynamic compliance, aerodynamic airway resistance, coefficient C20/C, and the time constant. Correlation between the index of oxygenation, clinical assessment of the severity of respiratory failure and the duration of control mechanical ventilation was demonstrated. Conclusion: Rate of hyperextension and time constant are expressed by the correlation with the level of the oxygenation index, which allows them to be used for screening evaluation of severity critically ill patients during admission to the neonatal intensive care unit.

Key words: biomechanical characteristics of lungs, dynamic compliance, aerodynamic airway resistance, neonate, respiratory distress syndrome, hypoxic-ischemic encephalopathy

CASE OF SUCCESSFUL PREVENTION OF MULTIPLE ORGAN DYSFUNCTIONS IN 74 YEARS OLD PATIENT WITH SEPSIS AFTER CRAWFORD SURGERY COMPPLICATED WITH PLEURAL EMPYEMA, CHEST WALL TISSUES INFECTION AND OSTEOMYELITIS OF RIBS

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**AN-1401-061**

OUTCOMES OF SURGICAL CORRECTION OF CONGENITAL TIBIA PSEUDARTHROSIS DEPENDING ON THE ACTIVATION OF HHV-6/HHV-7 VIRAL INFECTION IN A CHILD WITH NEUROFIBROMATOSIS TYPE-1

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Abstract: Neurofibromatosis type-1 (NF-1) – is a common genetic disease affecting the skin, subcutaneous tissue peripheral nerves and bones (tibia pseudarthrosis). Immunomodulatory viruses HHV-6 and HHV-7 are classifying as a genus of roseoloviruses of subfamily β-herpesviruses. Reactivation of HHV-6 and HHV-7 inhibits immune system and indirectly promote to other infectious agents. The article deals with a unique case report of two repeated transplantations of fibula due to congenital tibia pseudarthrosis caused by NF-1. Results of the transplantations, related to active and latent HHV-6 and HHV-7 infection in a 6 years old child are discussed in the paper.

Key words: neurofibromatosis, HHV-6, HHV-7, active infection, latent infection

**AN-1401-063**

TACTICS OF TRACHEAL INTUBATION IN PATIENT WITH TUMOR OF TONGUE BASE

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Abstract: Anatomic deformations can cause complications during the tracheal intubation in the maxillofacial surgery and otorhinolaryngology. The article deals with a clinical case of tracheal intubation in a patient with the anatomic deformations. Successful tracheal intubation was performed in the patient in conditions of conscious and spontaneous breathing under the local anaesthesia, when a fibreoptic bronchoscopy was not available. Furthermore the article briefly discusses techniques of the tracheal intubation in conditions of anatomic deformations of the upper airways and methods of local anaesthesia for the guttur and hypopharynx.

Key words: ENT, maxillofacial surgery, difficult tracheal intubation, local anaesthesia for guttur and hypopharynx, blind tracheal intubation, fibreoptic intubation, video-assisted laryngoscopy, retromolar laryngoscopy, optic techniques of tracheal intubation, local anaesthesia for upper airways, inhibition of upper airways reflexes

**AN-1401-065**

CASE OF SUCCESSFUL TREATMENT OF PATIENT WITH STAB WOUND OF NECK COMPLICATED WITH BLOOD LOSS AND SHOCK

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Abstract: The article deals with a case report of successful treatment of patient with massive blood loss and shock. The observation showed that use of balanced crystalloid solution and modified gelatin 4% in the program of infusion therapy effectively corrects systemic haemodynamics and effect on haemostasis, electrolyte and acid-base balance.

Key words: shock, infusion therapy

AN-1401-068

COMPARISON OF APNEIC OXYGENATION AND HIGH FREQUENCY JET VENTILATION DURING DOUBLE LEVEL TRACHEAL RESECTION AND RECONSTRUCTION IN PATIENT WITH MULTIFOCAL TRACHEAL STENOSIS

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Abstract: The problem of respiratory support in tracheal surgery is still discussed in recent days. Anaesthesiologist must choose the most effective and safe respiratory technique during tracheal resection and reconstruction. The article deals with a case of comparison of apneic oxygenation (AO) and high frequency jet ventilation (HFJV) during double level tracheal resection and reconstruction in patient with multifocal tracheal stenosis and underlying cerebral trauma. Materials and methods: AO and HFJV were used due to surgical need for 20 min each technique. PVo2, PvCO2, hematocrit, blood glucose, acid-base balance in the v. Jugularis interna, noninvasive arterial pressure, heart rate, ECG and body temperature were fixed before and after the changing of respiratory support type. Additionally peak systolic speed (S) of blood flow in the a. Cerebralis media sinister was fixed by transcranial Doppler (“Angiodin BIOSS”, Russia).

Results: oxygenation of venous blood was sufficient after the both HFJV and AO use; PvO2 was 67.6 and 74.3 torr respectively. Speed of PvCO2 increasing was higher during AO (1.46 torr per min) than during HFJV (0.73 torr per min). Increase of S was bigger during AO than HFJV as well (59 vs 37%). The changes of PvCO2 and S were normalized in 15 min after reconnection to conventional mechanical ventilation. Other fixed parameters were normal and same during the use of both respiratory techniques. The patient involved in the study did not have any neurological or surgical complications in early postoperative period.

Conclusions: Both studied respiratory techniques provide sufficient blood oxygenation and can be accompanied with hypercapnia and cerebral hyperemia. These observations evident about the necessity to study the role of hyperoxia, hypercapnia and cerebral hyperemia in patients with underlying cerebral trauma undergoing tracheal resection and reconstruction. The study will help to make a strategy of the foreground use of HFJV and AO in these patients.

Key words: apneic oxygenation, high frequency jet ventilation, tracheal resection, cerebral hyperemia, transcranial doppler

AN-1401-071

APPLICATION OF DESFLURANE IN ANAESTHESIOLOGY

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Abstract: Desflurane (Des) – is a modern inhalation anaesthetic available in Russia since August, 2013. Des is a halogenated ether; its chemical structure is 2-difluoromethoxy-1-1-1-2-tetrafluoroethane (C3H2F6O). Special thermocompensated evaporators are used for Des dosing. Low solubility in blood and tissues of an organism causes fast absorption and elimination of Des. Blood/gas distribution ratio of Des is 0.42. Des distinctive properties are high saturated vapor pressure, super short duration of action and average power. Furthermore it is characterized by the minimal metabolism and lack of interaction with soda lime. Des is used for general anesthesia in a cardiac surgery, neurosurgery, out-patient surgery, pediatric practice and other areas of surgery. Des has more positive qualities and fewer limitations, than other inhalation anaesthetics (halothane, isoflurane, sevoflurane). High cost of the anaesthetic is compensated by quality and controllability of anaesthesia and reduction of stay time in recovery unit. Fast elimination of the anaesthetic from a body allows reducing a frequency of complications connected with violation of upper airway and hypoxemia, promotes early discontinuation of artificial ventilation, reducing somnolence, earlier restoring a muscular tone in the postoperative period.

Key words: desflurane, anesthesia
AN-1401-078
IRON METABOLISM AND ITS ROLE IN TRAUMATIC DISEASE
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Abstract: The article reviews recent studies of iron exchange and its role in a traumatic disease and traumatic shock. The review stresses a relationship of iron metabolism disturbance with free radical oxidation, lipid peroxidation and multiple organ dysfunctions. The article deals with data of unbound iron collect mechanisms, ways of endotoxemia activation, haemostasis and haemodynamics disturbance proving the role of iron in a multiple organ dysfunctions during traumatic disease.
Key words: traumatic disease, iron metabolism, free radical oxidation

AN-1401-082
NEUROVEGETATIVE STABILIZATION AS A PATHOGENETIC THERAPY FOR BRAIN DAMAGE
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Abstract: The article deals with neurovegetative stabilization as a pathogenetic therapy for brain damage. The approach is based on hypothesis that pharmacological effecting on central nervous system is able to make a passive protective medical system which can be close to passive protective systems widely represented in the nature. Complex opioid and clonidine administration provides sufficient level of neurovegetative stability on account of effecting on neuro-regulative structures the brain steam. Neurovegetative stabilization should be carry out in order of warning principle. In our opinion optimal doses are fentany 0.2-1.4 mkg kg-1 per hour, clonidine 0.2-0.7 mkg kg-1 per hour, propofol 0.5-2 mkg kg-1 per hour, pentholon sodium 1-4 mkg kg-1 per hour, diazepam 0.4-0.5 mkg kg-1, and midazolam 0.05-0.2 mkg kg-1 per hour. A criterion of the therapy sufficiency is a consistency between changes of different functional parameters. We believe the most important that new level of functioning must be maximally integrated and harmonized. It is possible if all pharmacological agents include the most reliable programs of adaptation complex human body reactions.
Key words: severe brain damage, defense adaptation reactions, neurovegetative stabilization, opioid analgesics, clonidine

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INTRACRANIAL ARTERIO-VENOUS MALFORMATIONS DURING PREGNANCY, LABOR AND POSTPARTUM
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