

## **Rehabilitation of children of early age with an obstructive bronchitis on a background encephalopathies**

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It is lead research at 31 patients with an obstructive bronchitis (UNIFORMS) on a background перинатальной encephalopathies. The group of comparison included 17 children without клинико-анамнестических data of defeat ЦНС. At children I of group decrease in a cellular part of immunity (CD3 + (47,0±3,6 %), CD4 + (38,0±5,1 %), CD8 + (12,9±3,3 %), in comparison with children of II group (p<0,05) is revealed. Comparing parameters I and II гр. Have revealed insufficiency (p<0,05) фагоцитарной activity нейтрофилов and гуморального a part of immunity (IgA-0,52±0,1; IgG-5,59±0,76; IgM-0,99±0,15 г/л), during recover parameters of immunity were not restored, keeping attributes secondary иммунологической insufficiency. In the sharp period increase диеновыхкхонъюгат in plasma of blood in 2,5 times in I to group, in comparison with children of II group is revealed; Authentic increase of the maintenance (МДА) in эритроцитах and plasma of blood at patients of 1 group, in the regenerative period decrease МДА in plasma of blood up to an initial level comes only at children of group of comparison. In 1 group its parameter remained above on 28 %. Thus, the general antioxidizing activity at children I of group in the sharp and regenerative periods it is barefooted remains lowered in 1,5 times in comparison with the control (p<0,05). In 1 group of children authentic decrease in activity of enzyme glucose-6-фосфатдегидрогеназы is revealed (p<0,05), the tendency to which normalization was observed only in control group. Direct correlation communication between parameters перекисного oxidations липидов and the immunity, most distinctly expressed at patients I of group is proved. Considering pathogenetic features of current рецидивирующего a bronchitis at children with ПЭ alongside with the standard treatment it is barefooted in complex therapy at 15 children of 1 group included as иммуномодулятор лейкинферон and an antioxidant эмоксипин. As a result of treatment at the majority of children (73,3 %) it is received клинико-иммунологический effect, level МДА has decreased to norm at 66,7 %. Strengthening of activity АОЗ (p<0,001) was observed in 1 group (p<0,01). Thus, at treatment рецидивирующего an obstructive bronchitis efficiency лейкинферона and эмоксипина at children with ПЭ as pathogenetic therapy is proved

## **High-energy technologies in outpatient surgery of nasal cavity**

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Modern development and socialization of the society dictates a need in the development and implementation in practical public health, modern, functional, minimally invasive methods of treatment of nasal cavity diseases, which can be carried out on the high professional level with good clinical outcome. The actuality of high-energy laser is caused by the spread of diseases.

Annual increase of frequency and the spread of nose and paranasal sinuses diseases are marked all over the world by 1-2% [Gadzhimirzaev G.A., 2004]. About 21% of the population in Russia suffers from persistent violation of nasal breathing in chronic vasomotor rhinitis, and 40% of people showed periodic symptoms characteristic for this disease [Koshel I.V., 2009]. The spread of chronic polypous rhinosinusitis and benign tumors of the nasal cavity from 0.5 to

4.3% among diseases of upper respiratory tracts are marked in Russia [Lopatin A.S., 2007]. Another moment is the opportunity to use modern high-tech equipment in the treatment of somatically burdened patients with bronchial asthma, diabetes, impaired blood coagulation system, diseases of the cardiovascular system. Economic efficiency by absence of possibility of patient's hospitalization in specialized department; implementation of high-tech care in the outpatient department or in the one day surgical hospital; fast performance of surgery with minimal complications, achievements of good clinical outcome [Blotskiy A.A, Blotskiy R.A., 2012].

Laser radiation achieving several effects which is: heating and cutting tissue, separation and welding of biological tissues, coagulation, evaporation and ablation of tissue, ablastic and bloodless of surgery.

#### **Aim of work**

Restoration of nasal breathing and receiving good clinical results can be achieved by means of high-energy semiconductor laser in contact mode in such pathological processes as: chronic vasomotor rhinitis, chronic nasal polyps, benign tumors of the nasal cavity, posttraumatic atresia of nasal vestibule and nasal cavity synechia.

#### **Materials and methods**

A contact laser vasotomy of lower nasal turbinate was performed in 83 patients with chronic vasomotor rhinitis. The operation was performed under local anesthetic ointment. The deposition of 2 or 3 coagulation grooves on the free edge of the inferior turbinate from its posterior end to the anterior one was performed with the help of the distal end of semiconductor high-energy laser in contact method in continuous mode of laser radiation with an output of 5 watts in mucous membrane of the nasal cavity. 3 days after surgery the edema and the fibrin plaque are determined in the mucous membrane of the inferior turbinate at the place of laser exposure. 10 days after surgery we determine a complete recovery of mucous membrane surface on the inferior turbinate. The effectiveness of laser contact vasotomy of lower turbinates is 97.5%.

Another pathology is chronic nasal polyposis. The polypous tissue is located in the middle nasal meatus in the first degree of the nasal cavity polyposis, the polypous tissue comes out beyond the middle nasal meatus and reached the lower edge of the middle turbinate in the second degree, the polypous tissue is located in the common nasal meatus and leads to permanent violation of nasal respiration in the third degree.

Contact Laser interstitial thermotherapy of chronic nasal polyposis was performed under local anesthetic ointment. A technique of laser interstitial thermotherapy (LITT) leading to the change of the polyp color from the light yellow to the milk one and its necrosis and disintegration. It was performed with the help of the distal end of semiconductor high-energy laser in contact method in continuous mode of laser radiation with an output of 5 to 8.5 watts in the mucous membrane of the nasal cavity. A good functional outcome after LITT according to the endoscopy was obtained in 18 of 20 patients with the second degree of nasal polyps increase. Re-LITT was performed in two patients who showed good functional outcome.

Postoperative patients received IGKS spray for 1 month in a dose of 200 mg x 1 time per day followed by the decrease of the drug dosage of 100 mg x 1 time per day for 1 month with subsequent abolition of drug and the conducting of repeated IGKS courses that provided persistent period.

Post-traumatic atresia of the nasal vestibule and the synechia of the nasal cavity occurs after injury and surgery of the nasal cavity and can lead to nasal breathing violation of different degrees. Restoration of nasal breathing was performed after laser excision of the nose vestibule scar membrane and nasal cavity synechia. Full restoration of the mucous membrane of the nasal cavity was determined by endoscopy of the nasal cavity after 10-14 days after laser excision of the synechia.

Benign tumors of the nasal cavity such as hemangioma of the skin part of nasal septum, bleeding polyp of the nasal septum were also gone after laser excision.

The effectiveness of surgical laser in restoring functions of the nasal cavity was evaluated according to the results of anterior active rhinomanometry which include determination of the total volumetric flow (TVF) and total resistance of the nasal cavity. Total volumetric flow (TVF) of the nasal cavity approach to normal range in patients with synechia of the nasal cavity, chronic vasomotor rhinitis, polyposis of the nasal cavity in one month after surgery. Nasal cavity total resistance significantly decrease in patients with nasal cavity synechia, chronic vasomotor rhinitis, nasal polyposis in one month after surgery.

**Conclusion:**

1. The use of high-energy laser in the treatment of chronic vasomotor rhinitis, the nasal cavity polyps, synechia and post-traumatic atresia of the nasal vestibule, benign tumors of the nasal cavity allowed to achieve good clinical results.

2. The use of surgical laser allows to carry out a number of surgical interventions in the outpatient department without patients' hospitalization in specialized hospital.

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## **Antioxidant therapy by Reamberin in complex treatment disintegrative pelvis injuries**

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**Abstract:** The authors propose a method of complex treatment of disintegrative pelvis injuries with using antishock external fixation and antioxidant medicament Reamberin. The use of this method reduces amount of bleeding in the early period. Modular principle of construction of the AEF allows to supplement the front (antishock) module, the rear (after stabilization of vital functions of the patient) to the implementation of the final separated repositioning of front and posterior sections of the pelvis.

To date the part of fractures of the pelvis in patients with multiple injuries ranges from 20% to 52% in the structure of injuries of the human musculoskeletal system. Despite the evident progress that occurred in the combined treatment of traumatic disease in last 20 years the mortality in patients with severe combined and multiple injuries of the pelvis remain high (35% to 70%).

Timing of the final fixation of the pelvis are directly dependent on the efficiency of treatment of patients during the first period of traumatic disease. This fact makes us search for new treatments of critical conditions in trauma surgery.

The derivatives of succinic acid have most pronounced antioxidant and antihypoxanth effect. Reamberin<sup>®</sup> is representative of this group of drugs, the positive effect is observed in treatment of practically all critical conditions and surgical diseases.