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**CRITERIA OF THE DIGESTIVE SYSTEM DYSFUNCTION IN NEWBORNS
CONCURRING PERINATAL PATHOLOGY**

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Introduction. Severe forms of perinatal pathology in newborns are accompanied by clinical signs of multiorgan dysfunction, with dysfunction of the digestive system, which is manifested by exo- and endocrine insufficiency of the pancreas and dysfunction of the intestine.

The study aim was to determine perinatal factors and clinical manifestations of the digestive system functional disorders in newborns suffering from critical conditions. An examination of 205 newborns was conducted, including: Group I (experimental), which was divided into two subgroups - IA (consisting of 73 newborns with manifestations of perinatal pathology of moderate severity) and IB (consisting of 82 children with manifestations of severe perinatal pathology); Group II (control), which included 50 relatively healthy newborns.

According to the data, the risk factors for developing adaptation disorders in newborns are: Somatic pathology in mothers: pathology of the cardiovascular system is 36.59, 65.75 ($p < 0.05$) and 44.00%, blood diseases compensate 56.10, 61.64 and 56.00%, gastrointestinal pathology is responsible for 13, 41, 28.77 ($p < 0.05$) and 8.0%, pathology of the excretory system refers to 26.83, 24.66 and 36.00%, pathology of the respiratory system is 9.76, 5.48 and 6, 00%, diffuse goiter refers to 20.73, 27.40 and 20.0%, oncological and gynecological pathology conclude 19.51, 24.66 and 14.00 in IB, IA and II study groups. Pregnancy complications: threat of abortion concludes 29.27, 28.77 and 30.00%, placental dysfunction - 12.20, 8.22 and 4.0%, miscarriages/abortions - 23.17, 30.14 and 20.0%, oedema of pregnant women - 18.29, 9.59 and 20.00%, preeclampsia - 4.88, 4.11 and 2.00%, polyhydramnios - 9.76, 6.85 and 2.00%, isosensitization by AB0 TA Rh factor refers to 10.98, 13.17 and 18.00% in groups IB, IA and II. Pathology of childbirth: OAA concludes 17.05 ($p < 0.05$), 8.22 and 2.00%, umbilical cord entanglement around the neck refers to 6.10, 5.48 and 4.00%, respectively, in IB, IA and II groups. According to the study, the most severe cases of perinatal pathology in newborns were caused by such conditions as: respiratory disorders - 95.12% (required mechanical ventilation - 82.93% of children), perinatal CNS lesions - 82.93%, multiple organ failure - 28, 05%, meconium aspiration syndrome - 45.12%, convulsive syndrome - 19.51%, cerebral edema - 19.51%, severe asphyxia - 10.98% and moderate asphyxia - 20.73%. Clinically combined disorders of the digestive system in newborns with perinatal pathology were characterized in IB and IA groups, respectively: reduced food tolerance - 86.59 and 35.62%, vomiting/stasis - 80.49 and 30.14%, paresis/weak peristalsis - 57.32 and 9.59%, suppression of the sucking reflex - in 16.44% in IA group and lack of reflex - 3.66% in IB group.

Thus, the study of the medical cards has showed the most significant associations of tolerance disorders in newborns with sentimental conditions in mothers and asphyxia in childbirth. It should also be noted that the violation of food tolerance in critically ill newborns correlated with a more pronounced severity of perinatal pathology.

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**PAIN AND WOUND HEALING DURATION ACCORDING TO DIFFERENT METHODS
OF SURGERY CONCERNING PILONIDAL SINUS TREATMENT IN CHILDREN**

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Pilonidal sinus (PS) in children is a frequent disease which occurs in 5% of children population. It is generally accepted, that treatment of PS can be only surgical. Despite of long history of development of surgical treatment of PS in children, this pathology is associated with a significant pain and long duration of wound healing. The basic goal of surgery is removal of main inflammation source with all primary holes, damaged tissues and secondary fistulas. The question of searching a method which can provide the least pain intensity and the shortest duration of wound

healing remains relevant. Surgical method has to provide: minimal duration of hospitalization, be as painless as possible, complete cure with minimal risk of recurrence.

The aim of the study is to determine and compare duration of pain, pain intensity and postoperative wound healing according to the different methods of operative treatment of pilonidal sinus in children. 40 cases of PS in children, operated in Children's Clinical City Hospital were analyzed. Despite of surgery method, before operation all children underwent a cleansing enema and shaving of surgical field. Operations were performed under general anesthesia in the prone-jack knife position. The methods of skin-fascial plastic and classical method (sewing to the fascia) were compared. Duration of postoperative wound healing, duration of pain and pain intensity were determined.

Postoperative wound healing rate was 50% shorter in cases of use of skin-fascial plastics in comparison with the fascia method. Duration of pain was 25% less in children, operated with a skin-fascial plastic method. Skin-fascial plastic provides less pain intensity to 60% at the first day after operation and 70% at the fifth and seventh days according to the pain rate of classical method.

Skin-fascial plastic method provides less pain intensity to 50%, less duration of pain to 25% and provides less pain intensity up to 70% in comparison to classical method.

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MAXILLARY SINUSITIS AND DIABETES MELLITUS

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Diabetes mellitus (DM) is a very common disease. Specialists of various profiles, including otolaryngologists, deal with this problem. It should be noted that not much attention has been paid to the state of the ENT organs with diabetes, although the pathology is found in 59% of patients with diabetes. The treatment of such patients is not an easy task for both the otolaryngologist and the endocrinologist. Patients with diabetes are known to have a more severe course of ENT diseases and a poorer prognosis of surgery.

In the structure of morbidity in ENT pathology, a leading place belongs to acute sinusitis (5-10%).

According to the data of an epidemiological study, the prevalence of chronic sinusitis among patients with diabetes at the age of 18–44 years is 28.4%, compared with 18.4% among the rest of the population of the same age.

The main causative agents of acute rhinosinusitis are *Streptococcus pneumoniae* and *Haemophilus influenzae*. In chronic sinusitis, *P. aeruginosa*, *S. aureus*, *Actinomyces*, as well as fungal pathogens are more often detected.

In patients with diabetes, the most common causative agents of sinusitis are the gram-positive bacteria *S. aureus*, *S. epidermidis*, *S. pyogenes*, *S. pneumoniae*; gram-negative bacteria *E. coli*, *P. aeruginosa*, *M. catarrhalis*, *H. influenzae*; anaerobic *P. mirabilis*, *Peptostreptococcus*, *Bacteroides* spp.; fungal microorganisms of the genera *Aspergillus*, *Mucor*. It is noteworthy that 30% of diabetics carry *S. aureus* in the nasal cavity, compared with 11% in the general population. In patients with diabetes, acute fungal sinusitis is often observed, which is facilitated by metabolic disorders. This is especially due to the acidic environment of tissues rich in glucose and an increase in iron content due to disturbance of its connections with transferrin in the blood.

Moreover, a significant decrease in nasal mucociliary clearance and pH of nasal secretions is determined. Thus, the nasal mucociliary clearance in patients with diabetes was 2.5 times higher than in healthy individuals, and the pH of the nasal secretion increased to 7.96 ± 0.75 (compared with the norm of 6.43 ± 0.67).

Sinusitis in diabetes occurs in the background of decrease in the activity of the main antimicrobial factors of immunity, the affinity of produced antibodies, opsonizing properties of serum, phagocytic and bactericidal activity of neutrophils. A decrease in the bactericidal activity of neutrophils is associated with disorders of both oxygen-dependent and oxygen-independent antimicrobial systems. Patients with diabetes are vulnerable to a rapid progression of ENT infection