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One of the problems of surgical treatment is the need to eliminate the soft tissue defect after PS excision, which is the main substrate that leads to longer treatment duration, long-term incapacity, difficult return to normal daily activities and decreasing of the quality of life. Therefore, determining the methods of treatment of PS in children, which will help reduce the number of complications and relapses, reduce the duration of hospitalization, remains relevant.

The aim of the study. To compare the results of PS removing with subsequent skin-fascial plastic and PS removing with suturing of the wound edges to the sacrococcygeal fascia.

Materials and methods. Database of patients who were being treated for PS, aged 13 to 18 years, was analyzed. Patients were divided into 2 groups: group I included children who, after PC removing, underwent surgery of a soft tissue defect according to the method of skin-fascial plastic in their own modification (n-25). Group II included patients who underwent PC removing with suturing of the wound defect to the bottom of the wound (n-40). Intra- and postoperative indicators and long-term results were evaluated. The analysis was carried out according to the following criteria: duration of hospitalization, pain and healing time, presence of complications and relapses of the disease.

Results. The duration of surgery in both groups did not differ significantly and ranged from 30 to 50 minutes, as well as the average volume of blood loss: from 7 to 10 ml. No intraoperative complications were registered. The average length of hospitalization after surgery was almost the same in both groups. The duration of pain in the 1st group was twice as short (by 54%). The healing time in the sacrococcygeal fascia suturing group was 61% longer compared to that in group I. The number of postoperative complications in group I was four times greater than in the skin-fascial plastic group. During the year of observation, recurrences of the disease were noted in 4 children. No recurrence was registered in the skin-fascial plastic group.

Conclusions. The method of skin-fascial plastic surgery allows to reduce the number of complications, to significantly reduce the duration of hospitalization, pain and wound healing time, compared to classical operative methods of treating pilonidal sinuses in children. The use of skin-fascial plastic surgery allows you to avoid recurrences of the disease, which makes this method the method of choice for the treatment of pilonidal sinuses in children.

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FECAL CALPROTECTIN AS A DIAGNOSTIC MARKER OF INFLAMMATORY PROCESS IN THE INTESTINAL MUCOSA IN PRETERM INFANTS WITH PERINATAL PATHOLOGY

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Introduction. Fecal calprotectin (FC) is a heterocomplex calcium- and zinc-binding protein that exhibits bactericidal, fungicidal and immunomodulatory properties, performs regulatory functions in inflammatory reactions, and has a beneficial effect on the protection of the body in physiologically normal environments, such as the intestinal ecosystem, in healthy infants during the first weeks of life [Kapel N, 2010; Li F, 2015; Lychkovska OL, 2015; Koninckx CR, 2021]. FC is released from cells under stress or damage and enters the feces and reflects the transepithelial migration of neutrophils to the intestinal lumen, is a marker of intestinal inflammation and allows to differentiate irritable bowel syndrome and inflammatory bowel disease [Li F, 2015; Katzinger J, 2020]. FC is mainly derived from granulocytes, its concentration is directly proportional to the degree of transepithelial migration of granulocytes or newly recruited macrophages to the intestinal tract. Thus, the increased concentration of FC may be the result of higher intestinal permeability, the establishment of intestinal flora, as the infant's body has not yet developed the ability to regulate it, the response to nutritional antigens, as well as the colonization of the intestine with commensal microbes that help prevent intestinal infections and block the interaction between pathogens and host cells [Savino F, 2010; Kapel N, 2010].

The aim of the study. To determine the level of fecal calprotectin as a diagnostic marker of inflammatory process in the intestinal mucosa in preterm infants with perinatal pathology.

Materials and methods. The examination of 148 preterm newborns was carried out. The first group consisted of 91 children, at a gestational age of 29 (0/7) - 36 (6/7) weeks with manifestations of severe neonatal pathology with signs of disorders of the functional state of the gastrointestinal tract, the second group - 57 conditionally healthy neonates, at a gestational age of 35 (0/7) - 36 (6/7) weeks.

Results. According to the research, in preterm infants of group I, compared with group II, an increase in the level of fecal calprotectin in the meconium (552.6±25.61 μg/g and 269.5±11.65 μg/g, $p<0.0001$) was found, which indicates acute neutrophilic inflammation of the intestine, which corresponds to increased migration of granulocytes through the mucous membrane, infiltration of neutrophils and leakage into the lumen due to increased permeability of the intestinal wall, immaturity of the immune system, which is especially severe in premature infants with perinatal pathology.

Conclusions. Fecal calprotectin is a biomarker that evaluates the intrauterine environment and acts as a marker of increased permeability of the intestinal mucosa due to inflammation.

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PROGNOSTIC VALUE OF PLASMA CYSTATIN C AS AN EARLY BIOMARKER OF SEVERE KIDNEY DYSFUNCTION IN CRITICALLY ILL PRETERM NEWBORNS

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Introduction. Recent decades have been marked by significant progress in the development of technologies for raising babies born before the physiological term, in particular, in newborns with low and very low birth weight. However, the burden of disease among children of the above-mentioned groups has increased significantly, including due to the development of a significant number of complications against the background of combined perinatal pathology. Acute kidney injury (AKI) is one of the critical conditions of the early neonatal period, and, according to the literature, the incidence rates among premature patients in the departments of anesthesiology and neonatal intensive care are 18-56% (Askenazi D.J., 2020, Selewski D.T., 2015) . Thus, the main problem of modern neonatal nephrology will remain the study of highly specific and sensitive biomarkers of renal dysfunction, which would make it possible to form a risk group among patients at the preclinical stage**.**

The aim of the study. To determine the role of plasma cystatin C in predicting severe renal dysfunction in premature newborns with severe perinatal pathology at 25-36 weeks' gestation.

Materials and methods. 57 infants were included in this part of the study. Among them, 27 children with GA 25-31 weeks were treated in the neonatal intensive care unit of the CNPE "City Clinical Maternity Hospital №2" in Chernivtsi during the period 2018-2020 and formed the 1st group. The control group consisted of 30 conditionally healthy premature babies with gestational age of 34-36 weeks. The criteria for inclusion in the study were: birth weight of 500 g or more, but less than 2500 g, presence of informed consent for participation in the study signed by the child's parents, gestational age more than 25 weeks, but less than 37 weeks. Determination of the level of cystatin C in plasma was carried out by the turbidimetric method on the ACCENT-200 automatic analyzer. Statistical analysis was performed using Statistica software (unpaired Student's t-test for independent samples).

The results. Cystatin C is a low molecular weight protein (13 kD) from the group of cysteine protease inhibitors. Unlike plasma creatinine, this protein is secreted into the extracellular fluid, so elevation of its level occurs much faster when kidney function is impaired. Plasma cystatin C levels depend exclusively on GFR and remain unchanged even under conditions of infection and other non-infectious factors. Our results showed significantly significant differences between I snd II groups (T-value – 66.55, df – 55, $p<0.05$, p var. <0.05).