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Aim of the study. To conduct research of the maintenance of cytokines in the serum of blood and urine for children with anorectal malformations in the dynamics of chronic pyelonephritis.

Methods. Determined repertoire of the main pro-inflammatory and anti-inflammatory cytokines in urine (IL-1 β , IL-6, IL-8, TNF- α , IL-10, IL-1RA) by the ELISA method in 3 points of research: at arrival of the patient in a hospital, prior to antibacterial therapy, in 5-7 days from the beginning of a course of treatment and in 1,5 months after treatment. 54 children with chronic pyelonephritis were examined: 40 patients who had a combination of congenital defects of an urinary system to defects of anorectal area (1 group) and 14 children - without anorectal of defects (the 2nd group). Average age of patients were 4,5±3,6 years old. The group of comparison was made by 20 children with small surgical pathology (umbilical or inguinal hernia) in the preoperative period stratified on age and sex.

Results: In the 1st group the reliable increase in concentration of IL- (p<0,007), IL-6 (p<0,003), IL-8 (p<0,003), TNF α (p<0,003) in all three points concerning group of comparison was registered. In the 3rd point of IL-1 β (p<0,003), IL-6 (p<0,003), IL-8 (p<0,003) and TNF α (p<0,002) in urine reached the maximum result. In the 2nd group increase of the IL-8 level (p<0,005) concerning group of comparison is noted. The maintenance of TNF α in urine in the 3rd point was much higher, than in the 1st and the 2nd points. Concentration of IL-1 β , IL-6, IL-8 in children's urine of the 1st group was authentically above indicators of the 2nd group.

Conclusion. Monitoring of cytokines in urine is a perspective noninvasive method of an assessment of inflammatory process of an uric path at children with anorectal malformation.

PEDIATRIC DEPARTMENT EXPERIENCED IN CHILD BURNS TREATMENT (10 YEARS)

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Introduction. The treatment issue of children with thermal traumas is a debated topic even to this day. According to the Department of Burns and Plastic Surgery data, the burns make up 5% to 6% of all acute pediatric traumas. Thermal lesions, depending on the complications that developed and their severity, are divided into: flame burns (14.2 %); burns through contact with hot solids (9.6%); electric burns (3.4%); Though the majority is caused by hot liquids (72.8%).

Aim of study. Research of the results of management and treatment of children with thermal injuries, in the Department of Burns and Plastic Surgery in Republic of Moldova.

Materials and methods. During the past 10 years (2007-2017) in the Department of Burns and Plastic Surgery, there were treated 5715 children with burns (0-3 years 50.6%, 4-7 years 24.4%, 8-18 years 25%). Superficial burns -2844 (55.2%). Deep burns – 2871 (44.8%). Patients hospitalized with burn shock (S>15% TBSA) – 645 children.

Surgical treatment (excisional debridement of the burn, autodermoplasty, limb amputation) – 2820 children with thermal lesions.

Results. Respecting certain phases in the system, when providing medical assistance to burned children, allowed avoiding any severe complications, decreased the death rate and post burn disabilities.

Evacuation of burned children with thermal lesions in critical conditions is done in the first 2-3 hours after the trauma, and implies anti-shock treatment at the trauma site and during transportation. Information about the burned children is received through Sanitary Aviation non-stop. It offers the possibility of movement of the consultant doctor to the trauma site. The accumulated experience indicates, that the beginning of intensive care at an early stage (adequate thermal shock therapy, septic complications prophylaxis, early surgical reconstruction of affected skin) allows the obtaining of positive results in this surgical pathology.

Mortality review in ten years (2007-2017) (0.15; 0.5; 0; 0.28; 0; 0.24; 0.12; 0.11; 0; 0;) shows the dynamics and the tendencies of the treatment process in Pediatric Burns Department.

Conclusions. Moderately positive results in the burned children treatment depends on rational tactics:

Fast evacuation of the child with severe thermal lesions in to the specialized unit (Department of Burns) during the first few hours of the acquired injury;

- Anti-shock treatment during transportation;
- Guarantee of primary conditions for effective treatment in the Burns Department;
- 2 intensive care wards;
- Up-to-day surgical devices (necrotomes, electric dermatomes, perforators, electro coagulators);
- Non-stop access to blood, blood components, skin substitutes;
- The most efficient burns "treatment method" is prophylaxis;
- Statistics shows that due to prophylaxis the incidence of burns in the Republic of Moldova decreased up to 20 %.