Inguinal hernia is the most common disease in the practice of pediatric surgeon and is 70-85% of hernias in children [1,4,6,10]. According to the literature, the share of operations carried out routinely in the clinic of pediatric surgery for inguinal hernias account for up to 30% of cases [9,11]. The incidence of this disease in the pediatric population assessment of both domestic and foreign authors is from 1 to 5% [1,6,8,10,11]. But, in spite of the developed diagnostic criteria, frequency of strangulated hernia, which may be accompanied by complications, leading to dysfunction and, sometimes, to the death of testicle, part of the intestine, according to different authors, up to 10%. Currently, there are two methods of surgical correction of inguinal hernia: open and laparoscopic [10]. Despite the prevalence of the disease in the pediatric population, the number of comparative studies of open and laparoscopic approaches to the treatment of inguinal hernia in children is limited [4,7,10,12].

The aim of our work is to improve the results of diagnostics and treatment of inguinal-scrotal hernias in children.

Materials and methods. At the Department of Pediatric Surgery and Anesthesiology Zaporozhye State University on treatment were 186 children with inguinal-scrotal hernias in the period from 2010 to 2015.

In 76 (40.8%) children inguinal hernia combined with umbilical hernia, with dropsy of testicular membranes - in 20 (10.7%) children.

For the purpose of diagnosis using physical examination, ultrasound of the inguinal-scrotal area. In patients with a one-way process, and with huge hernias that alone does not fully reduce a into the abdominal cavity, but without clinical signs of infringement carried out a standard inguinal access.

Laparoscopic access was performed by the standard method PIRS. Surgery was performed under general anesthesia combined with standard tools, endosurgery endosurgical company Karl Storz GmbH (Germany).

Results and discussion. Analyzing the results, we found that the majority of children 158 (84.9%) diagnosis of inguinal-scrotal hernias based on the complaints of parents and children physical examination. At the same time in 28 (15%) patients were diagnosed with a hernia during laparoscopic hernia repair performed on the one-sided hernia.

172 (92.4%) children were operated in a planned manner. 14 (7.6%) children reported with strangulated inguinal-scrotal hernia operation performed in urgent procedure.

Surgical treatment of 78 (42%) children made open access. Among them, 70 children were operated in a planned manner. 8 (4.3%) the patients admitted to the clinic
strangulated inguinal-scrotal hernia with infringement of a duration of more than 5 hours, made Urgent surgery.

In 108 (58%) children underwent laparoscopic correction. In 15 children with large inguinal-scrotal hernias further identified thick strands fixation of the greater omentum in the inguinal canal, which was the setting of additional working 5-mm tools for the manipulation, to complete the operation without switching on the conversion. Transient scrotal edema was observed in all children operated open pit. In patients with laparoscopic access this complication was not. 160 (86.2%) children were examined during the year field operations. 18 children found hernia of contralateral region. In 12 children revealed edema of the testicles skins. At the same time in 3 children residual hydrocele alone disappeared after 6 months.

Thus, the criterion for diagnosis at the level of a physical examination is an ultrasound diagnosis inguinal-scrotal area. Laparoscopic access has the advantage for diagnosing of contralateral region.

Conclusions. 1. The optimal duration of the operation is the time of diagnosis with a view to preventing complications and damage scrotum. 2. Laparoscopic access allows you to perform an operation without problems on both sides, which in turn prevents the occurrence of contralateral hernia in catamnesis.