Volume 2, Issue 01, January 2024 ISSN (E): 2938-3765

# APPROACHES TO SURGICAL TREATMENT OF CONGENITAL INGUINAL HERNIA AT THE CURRENT STAGE OF DEVELOPMENT OF PEDIATRIC SURGERY

Khalilov Sh. K.,
Abduvalieva Ch.M.,
Abdulazizov J. G.
Andijan State Medical Institute
Republican Scientific Center for Emergency Medical Care

**Abstract**
When starting this work, the authors set out to highlight the most subtle aspects of the classical surgical treatment of congenital inguinal hernias in children, which are often overlooked in the daily activities of a pediatric surgeon. The article outlines the accumulated experience in treating this pathology over the past 7 years and substantiates the need for an individual choice of tactics for managing a child with an inguinal hernia. The points that the authors rely on when choosing an open or endoscopic method of treatment are also given. The problem of training a new generation of pediatric surgeons has been raised in connection with the abolition of classical methods of surgery and the increasing spread and introduction of endoscopy. The evolution of not only the endoscopic method of treatment, but also traditional open hernia repair is shown.

**Keywords**: pediatric herniology, herniorrhaphy, congenital inguinal hernia, hernia repair.

## Introduction

Herniology has undergone a lot of changes over the past decades. However, even at the present stage of development of pediatric surgery, questions remain unresolved about the most preferable method of treatment, the criteria that subsequently dictated a certain choice in favor of one or another technique.

## MATERIALS AND METHODS

K.D. Toskin, V.V. Zhebrovsky emphasized that tissues in children, especially young children, are delicate and thin, and tend to swell, rupture, and form hematomas [3]. Thus, when choosing a treatment method, it is fair to put in first place the condition of minimal tissue trauma, which will ultimately reduce the frequency of complications and minimize the number of relapses.

## RESULTS AND DISCUSSION

The trend in the modern world is the desire for aesthetics, the search for the most cosmetically beneficial surgical access. Undoubtedly important are such points as the time spent on the operation, which in turn correlates with anesthesia, its duration, and side effects. Do not forget that when performing laparoscopic procedures, there is a need for tracheal intubation, artificial





Web of Medicine: Journal of Medicine, Practice and Nursing
webofjournals.com/index.php/5

pulmonary ventilation (APV) and total muscle relaxation. The age of the child, the presence of hernia complications, and concomitant diseases are taken into account.

Through a retrospective analysis of 1410 medical records of patients at the Andijan pediatric surgery clinic with a diagnosis of inguinal hernia for the period 2016–2023. The advantages and disadvantages of the treatment methods used were identified, and a correlation between relapses and the disease correction technique was established.

During the period of time under review, 1250 children with inguinal hernia were treated using the open method in the Andijan Pediatric Surgery Clinic, and 160 using endoscopic technologies.

Most of the literature in recent years has been devoted to the description of methods for performing surgical interventions for inguinal hernias in children using minimally invasive technology [2]. We would like to dwell on the most important and relevant aspects of open operations for inguinal hernias in children from a practical point of view. In all cases, we use general anesthesia - intravenous or mask anesthesia with sevoflurane, designed for an average operation time of 15–20 minutes.

The team at the Andijan Pediatric Surgery Clinic is one of the proponents of hernia repair using V. Duhamel's method [3]. I would like to note that a number of authors note the achievement of a good cosmetic effect when using transverse incisions [3]. Our experience shows that the most favorable conditions that serve as a prerequisite for rapid healing of a postoperative wound by primary intention and the subsequent formation of a minimal, tender and mobile normotrophic scar are created with an oblique transverse skin incision.

The majority of patients managed to bandage the hernial sac without resorting to suturing, which serves as an additional traumatic factor and can subsequently lead to recurrence of the hernia. Only in 18 children the hernial sac was pre-stitched. In these patients, there was no correlation with age, but there was a direct connection with a history of strangulated hernia, which led to a pronounced adhesive process.

The vaginal process of the peritoneum, separated as much as possible from the surrounding tissues, is shaped like an hourglass. At the stage of ligation when applying a ligature, it should be remembered that the level of the tightened ligature knot must necessarily fall on the narrow part of the proximal portion of the process from the peritoneum. Too low a ligation of the hernial sac can further lead to the formation of a "funnel" and, as a consequence, to a recurrence of the hernia. To avoid cutting through an already tied ligature, we first cut it off above the tightened knot and only then the hernial sac, leaving a stump of about 0.5 cm. To speed up the obliteration of the vaginal process, its stump is carefully treated from the inside near the tied ligature with microwave electrocoagulation.

Harrison and involves preperitoneal passage and subcutaneous tying of a prolene thread around the internal inguinal ring through the lumen of a Tuohy needle inserted percutaneously over the elements of the spermatic cord or round ligament of the uterus. Currently, according to the collective opinion of many authors, the SEAL technology (subcutaneous endoscopically assisted ligation) is the most common and relatively protected from complications method of pediatric hernia surgery [4]. The success of the method lies in the idea of preperitoneal bypass and ligation of the hernial sac, which prevents relapses of the disease and injury to the elements of the inguinal canal.



Web of Medicine: Journal of Medicine, Practice and Nursing
webofjournals.com/index.php/5

## CONCLUSION

Currently, there are 2 optimal and equal methods of surgical treatment of inguinal hernias in children: laparoscopic herniorrhaphy and an open method, which involves isolating and ligating the vaginal process of the peritoneum - the hernial sac - without suturing it and opening the inguinal canal. The success of the operation with any method will depend to a greater extent on the skills of the operating surgeon than on the chosen method. Endoscopic hernia repair is preferable in children under 3 years of age, with a bilateral inguinal hernia, or a combination of inguinal and umbilical hernia.

## REFERENCES

1. Ignatiev R.O., Bogdanov S.E., Oznobishin V.N., Stolyarov V.Yu. Laparoscopic herniorrhaphy in children: a rational approach to choosing a technique. Kremlin medicine. Clinical Bulletin. 2011; (4): 42–7.
2. Ignatiev R.O. Evolution of endosurgical methods for treating children with inguinal hernias. Pediatric surgery. 2012; (6): 40–4.
3. Toskin K.D., Zhebrovsky V.V. Abdominal hernias. M.: Medicine; 2013.
4. Bushmelev V.A. Pediatric herniology – hernia repair or hernia repair? Pediatric surgery. 2019; (6): 50–3.
5. Dronov A.F., Poddubny I.V., Kotlobovsky V.I. Endoscopic surgery in children / Ed. Yu.F. Isakova, A.F. Dronova. M.: GEOTAR-MED; 2012.

Web of Medicine: Journal of Medicine, Practice and Nursing
webofjournals.com/index.php/5