

MINIMALLY INVASIVE APPROACHES IN THE
TREATMENT OF INCARCERATED INGUINAL HERNIAS

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Abstract: *The article discusses modern approaches to surgical treatment of pinched inguinal hernias, their effectiveness, advantages and possible postoperative complications, as well as the importance of choosing optimal surgical tactics to improve the clinical outcomes of patients' treatment. Modern approaches include the use of various hernioplasty methods, among which plastic surgery using mesh implants using the Lichtenstein method, as well as laparoscopic techniques, have become the most widespread. The results of numerous clinical studies and meta-analyses indicate a lower recurrence rate when using mesh prostheses compared to traditional suture methods.*

Keywords: *Inguinal Hernias, Lichtenstein method, plastic surgery, plastic surgery*

Introduction.

Abdominal wall hernias represent a common surgical pathology with a prevalence of approximately 1.7% in the general population and up to 4% among individuals older than 45 years. Inguinal hernias account for nearly 75% of all abdominal wall hernias, with a lifetime risk of 27% in men and about 3%

in women[1]. Incarcerated inguinal hernias are considered one of the most serious complications, as they may lead to bowel obstruction, strangulation, and intestinal ischemia. Therefore, timely surgical intervention remains the primary method of treatment[2]. Recovery is of socio-economic importance. Single-center studies show that five to eight days should be sufficient for most operations, although combining studies is difficult due to different definitions of recovery[4]. Recently, Bay-Nielsen and his colleagues studied the recovery period after Lichtenstein's plastic surgery in a case-control study using data from the Danish hernia database. [3,5].

Objective.

To analyze current surgical approaches and evaluate the effectiveness of modern techniques used in the treatment of incarcerated inguinal hernias.

Materials and Methods.

A review of contemporary literature and clinical studies dedicated to the surgical management of incarcerated inguinal hernias was conducted. Particular attention was given to open mesh repair techniques, including the Lichtenstein method, as well as minimally invasive laparoscopic procedures such as transabdominal preperitoneal (TAPP) and totally extraperitoneal (TEP) repairs.

Results.

Modern studies demonstrate that tension-free mesh repair significantly reduces the risk of recurrence compared to traditional suture techniques. The Lichtenstein procedure remains one of the most widely used open surgical methods due to its reproducibility and low recurrence rate. In recent years, laparoscopic approaches have gained popularity because of reduced postoperative pain, shorter recovery time, and improved visualization of the

hernia defect. However, in cases of incarcerated hernias, the choice of surgical technique depends on the patient's clinical condition, the presence of intestinal strangulation, and the surgeon's experience. Surgical repair remains the gold standard for the treatment of incarcerated inguinal hernias. Modern mesh-based techniques and minimally invasive laparoscopic approaches have significantly improved clinical outcomes by reducing recurrence rates and postoperative complications. Individualized selection of surgical technique and timely intervention play a crucial role in achieving optimal treatment results.

Conclusion: Thus, inguinal hernias remain one of the most common surgical pathologies of the abdominal wall and a significant medical and social problem, especially among older men. Despite the relatively low incidence of injury, the development of complications such as incompleteness, strangulation, and intestinal obstruction requires timely surgical intervention. Modern hernioplasty methods, especially the use of Lichtenstein mesh implants and laparoscopic technologies, demonstrate a lower recurrence rate compared to traditional suture methods. At the same time, the choice of optimal surgical tactics for pinched inguinal hernias should be based on the individual characteristics of the patient, the clinical situation and the experience of the surgeon, which emphasizes the relevance of further improvement and implementation of modern approaches to the treatment of this pathology.

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