UDC 617.557-007.43-055.1-008.1-089.163
DOI http://doi.org/10.30978/GS-2024-3-37

ISSN 2786-5584 print
ISSN 2786-5592 online

Severity of pain syndrome, functional activity, and quality of life in male patients with inguinal hernias in the preoperative period

A. V. Trots

SSI «Centre for Innovative Medical Technologies of the National Academy of Sciences of Ukraine», Kyiv

✉ trotsartem22@gmail.com

A. V. Trots, http://orcid.org/0009-0004-8456-0538

According to the European Hernia Society (EHS) and the Hernia Surge Group (HSG), males with inguinal pain syndrome make up the majority of candidates for planned inguinal hernia surgeries. Chronic groin pain in the preoperative stage typically has a negative impact on such patients' functional activity and quality of life. It is therefore considered a significant indication for planned surgery. According to recent research, appropriate functional outcomes, such as improved physical activity and patient quality of life, are as important as an accurate anatomical restoration of the inguinal region after planned inguinal hernia surgery.

Objective — to assess the severity of preoperative inguinal pain syndrome, functional activity, and quality of life in male patients with inguinal hernias.

Materials and methods. The study focuses on the preoperative clinical examination of 50 patients (males) with primary unilateral inguinal hernias. The patients were treated in the surgical department of the State Scientific Institution «Centre for Innovative Medical Technologies of the National Academy of Sciences of Ukraine» between 2018 and 2024. A questionnaire method was employed to assess the functional activity, quality of life, and severity of pain syndrome in patients before surgery. This method involved the use of the modified Carolinas Comfort Scale (MCCS), the European Questionnaire for the Assessment of Quality of Life (EQ-5D-3L), and the Visual Analogue Scale (VAS).

Results. The average pain severity index on the VAS was 2.1 ± 0.9 points. The MCCS was used to assess patients' functional activity, resulting in an average total score of 33.7 ± 12.1 points, which corresponded to 44.9 %, classifying the patients as «not satisfied» in the clinical group. The EQ-5D-3L descriptive system was used to assess patients' quality of life. We found that 30 % reported moderate mobility limitations, 18 % reported moderate self-care issues, and 34 % reported limitations in their daily activities. 24 % of patients exhibited moderate anxiety or depression-related symptoms. At the same time, all patients noted the presence of pain syndrome, with 76 % experiencing moderate pain and 24 % suffering severe pain.

Conclusions. The «symptomatic» group of males with inguinal hernias exhibits a high level of local pain syndrome in the area of the hernia protrusion (2.1 ± 0.9 on the VAS, and 24 % of patients reported a significant degree of pain severity before planned surgical intervention (> 3 points) according to the EQ-5D-3L system). In the vast majority of cases, it significantly impairs their functional activity and quality of life (66 % of patients are not satisfied with their quality of life (32.4 ± 5.6 points on the MCCS)). Effective local pain management is an important objective in the planned surgical treatment of inguinal hernias. This necessitates further investigation into surgical technique selection and procedure adjustments.

Keywords
inguinal hernia, quality of life, chronic pain, functional status.

ARTICLE • Received 2024-07-11 • Received in revised form 2024-08-15

According to the most recent data from the European Hernia Society (EHS) and Hernia Surge Group (HSG), the majority of patients who require planned surgical intervention for inguinal hernias experience symptoms, with men being the predominant group. A wait-and-see strategy may be appropriate for only one-third of the individuals who have a «minimally symptomatic» or asymptomatic progression of the disease [12]. At the same time, the presence of pain syndrome in the area of

the hernia protrusion is one of the primary reasons patients seek medical assistance, as well as the indication for planned surgical intervention. The onset of pronounced local pain indicates a higher risk of an incarcerated hernia, which increases the incidence of perioperative complications and reduces the effectiveness of surgical therapy [4, 14].

It should be noted that persistent groin pain at the preoperative stage negatively impacts the functional activity and quality of life for a specific group of patients. This serves as a compelling reason to proceed with planned surgery [2, 6].

The severity of preoperative pain is one of the important starting «points of reference», which serves as an original marker of the specified indicator's perioperative dynamics. It provides a more objective assessment of the effectiveness and quality of surgical treatment for inguinal hernias. Furthermore, it facilitates the comparison of various surgical techniques and modifications, thereby optimising their selection [10].

Modern perspectives on the outcomes of planned inguinal hernia reconstruction emphasise not only the reliability of morphological abdominal wall reconstruction in preventing hernia incarceration but also the importance of achieving adequate functional outcomes. This, in turn, becomes practically impossible without eliminating or significantly reducing the severity of preoperative inguinal pain syndrome, as well as improving related markers of physical activity and quality of life in patients after surgical treatment [8].

Nevertheless, this task remains unsolved at present.

Given the foregoing, preoperative assessment of inguinal pain syndrome, functional activity, and quality of life in the described patient population is unquestionably significant and relevant.

Objective —to assess the severity of preoperative inguinal pain syndrome, functional activity, and quality of life in male patients with inguinal hernias.

Materials and methods

The study focuses on the preoperative clinical examination of 50 patients (males) with primary unilateral inguinal hernias. The patients were treated in the surgical department of the State Scientific Institution «Centre for Innovative Medical Technologies of the National Academy of Sciences of Ukraine» between 2018 and 2024. This study was carried out in compliance with all measures to ensure safety for the health of patients, respect for their rights, human dignity, and moral and ethical norms (minutes of the meeting of the committee on the ethics of scientific research No 3 dated 09/21/2023).

The study's inclusion criteria were as follows: male sex, primary unilateral inguinal hernias with a symptomatic course, the absence of indications and the need for simultaneous surgical interventions on the abdominal cavity and/or the abdominal wall organs, and the patient's informed consent to participate in the study.

The study's exclusion criteria were as follows: women, patients with recurrent and bilateral inguinal hernias, patients requiring simultaneous surgical interventions on the abdominal cavity and/or the abdominal wall organs, patients with a history of radiation therapy to the area of the small pelvis, patients with hypogastric sensitivity disorders of any etiology, patients with severe concomitant cardiovascular, renal, or other systemic pathologies, and patients who did not give written consent to participate in the study.

All study participants underwent a thorough examination during the preoperative phase, which included anamnesis, survey administration, and a range of physical, clinical, laboratory, and instrumental procedures.

The anamnesis data collection process necessitated documentation of each individual patient's disease course. It included a mandatory description of inguinal hernia symptoms and their severity, the presence of an incarcerated hernia in the anamnesis, and the exclusion of criteria that would prevent the patient from participating in the study.

The physical examination included a comprehensive assessment and palpation of the patient's inguinal areas and the pubic symphysis area in both vertical and horizontal positions while at rest, as well as during straining. We also conducted a bilateral adductor test and elicited the cough impulse.

The mandatory laboratory tests included a complete blood count, a comprehensive urinalysis, a biochemical blood analysis (total protein, albumin, total bilirubin and its fractions, ALT, AST, urea, creatinine, glucose, C-reactive protein), a coagulogram (prothrombin index, prothrombin time, international normalised ratio, fibrinogen), a determination of blood group and Rhesus factor, a Wasserman reaction, and a blood test for viral hepatitis B and C markers (HbSAg, anti-HCVAg IgM and IgG).

A dynamic ultrasound examination of the inguinal areas, as well as the Valsalva test, were performed on the patients in both horizontal and vertical positions to identify the presence of a hernia, which is common in professional athletes.

The ultrasound criteria used to diagnose a hernia in professional athletes were protrusion of the posterior wall of the inguinal canal and an increase in the height of the inguinal space.

We performed pelvic magnetic resonance imaging (MRI) to address controversial physical and ultrasound signs of a hernia, which is common in professional athletes, and to conduct a thorough differential diagnosis of potential causes of groin pain (adductor muscle syndrome, pubic osteitis, hip joint pathology, etc.).

The diagnostically relevant MRI criteria for a hernia that is commonly found in professional athletes included:

- amplification of the MR signal from the upper branch of the pubic bone, along with signs of increased hydrophilicity in the inguinal canal structures;
- enhancement of the MR signal originating from the inguinal canal;
- increase in the height of the inguinal space (secondary criterion).

During the preoperative period, patients' pain syndrome at rest was assessed using the Visual Analogue Scale (VAS). The results were evaluated on a 10-point scale (0—10), with 0 indicating no pain and 10 indicating extremely severe pain.

Preoperative functional activity was assessed using an eight-question modified Carolinas Comfort Scale (MCCS) questionnaire. Each question independently assessed pain syndrome during physical exertion and at rest, as well as mobility limitation during physical exertion (with the exception of one question, which only assessed pain syndrome). The absence of a question about the subjective experience of having a mesh implant set this questionnaire apart from the standard Carolinas Comfort Scale (CCS) questionnaire. The MCCS questionnaire included five-point ratings for each question. The minimum score for each question is 0 points, indicating the absence of pain syndrome or mobility limitation during physical exertion. The maximum score is 5 points, representing extremely severe pain syndrome or mobility limitation during physical exertion. The minimum score for each question is 0 points, and the maximum score is 10 points (except for one question, where the maximum score is 5 points). Assessed questions: pain while lying down, pain and mobility limitation when bending forward, pain and mobility limitation while sitting, pain and mobility limitation during regular daily activities (e.g., getting out of bed, bathing, and dressing), pain and mobility limitation during coughing, sneezing, and deep breathing, pain and mobility limitation while walking or standing, pain and mobility limitation when climbing or descending stairs, pain and mobility limitation during physical exercises unrelated to the primary job. The total score was calculated by adding the scores from each of the eight questions, which could range from 0 to 75 points. All scores obtained were converted into percentages of the maximum possible score for the questionnaire. To simplify further analysis and the formation of clinical groups based on the level of satisfaction with functional results, the MCCS scores were stratified by symptoms severity. Patients were classified into four groups: very satisfied (J 5 %), generally satisfied (> 5 % ≤ 30 %), not satisfied (> 30 % ≤ 60 %), and very dissatisfied (> 60 %).

An assessment of the quality of life of patients with inguinal hernias was conducted prior to surgery using the European Questionnaire for the Assessment of Quality of Life (EQ-5D-3L), which consists of five questions. The findings of the EQ-5D-3L system were assessed on a question-by-question basis, with each question being assigned a score ranging from 1 to 3. A score of 1 indicated the absence of any complaints, a score of 2 indicated the presence of specific complaints, and a score of 3 indicated the presence of pronounced complaints. The following criteria were assessed: mobility, self-care, daily activities, pain or discomfort, and anxiety or depression.

Statistical analysis

We statistically processed the data using several variational and descriptive statistics approaches, along with the additional statistical analysis tool SPSS Statistics: An IBM Company, Version 23. The study includes descriptive statistics indicators such as the mean (M) and standard deviation (SD) for normal distribution, as well as the Pearson correlation coefficient (rxy).

Results

The age range of the patients in the study was 20 to 85 years. The average age was 62.1 ± 15.1 years.

The pain severity throughout the preoperative period was measured by the VAS, with an average value of 2.1 ± 0.9 points.

At the preoperative stage, the MCCS descriptive system was used to assess patients' functional activity, resulting in an average total score of 33.7 ± 12.1 points, which corresponded to 44.9 %, classifying the patients as «not satisfied» in the clinical group (> 30 % ≤ 60 %). The lowest score was 15 points, and the highest was 66. In a more detailed breakdown by group, 9 patients (18 %) with an average score of 19.2 ± 2.2 points were included in the «generally satisfied» category (> 5 % ≤ 30 %), which corresponded to an average of 25.6 %; 33 patients (66 %) with an average score of 32.4 ± 5.6 points fell into the «not satisfied» category (> 30 % ≤ 60 %), which corresponded to an average of 43.2 %; 8 patients (16 %)

Table 1. **Characteristics of functional activity of patients at the preoperative stage based on data from MCCS questionnaire**

Patient satisfaction	Number of patients	Average score
Very satisfied	0	–
Generally satisfied	9 (18 %)	19.2 ± 2.2
Not satisfied	33 (66 %)	32.4 ± 5.6
Very dissatisfied	8 (16 %)	55.5 ± 6.9
Total	50	33.7 ± 12.1

with an average score of 55.5 ± 6.9 points fell into the «very dissatisfied» category, which corresponded to an average of 75.0 %. None of the patients in the study reported being «very satisfied» (≤ 5 %).

Characteristics of functional activity of patients at the preoperative stage based on data from MCCS questionnaire are presented in Table 1.

The EQ-5D-3L descriptive system was used to assess patients' quality of life. We found that 15 patients (30 %) reported moderate mobility limitations, while the rest of the patients did not report any mobility limitations. 9 patients (18 %) reported moderate self-care issues, while the remaining patients did not report any difficulties in self-care. 17 patients (34 %) reported limitations in their daily activities, while only one patient (2 %) complained about the complete impossibility of doing daily routine tasks. All patients noted the presence of pain syndrome, with 38 patients (76 %) experiencing moderate pain and 12 patients (24 %) suffering severe pain. 12 patients (24 %) exhibited moderate anxiety or depression-related symptoms, whereas severe symptoms were observed in 2 patients (4 %).

Characteristics of patients' quality of life at the preoperative stage based on data from the EQ-5D-3L questionnaire are presented in Table 2.

The methodological aspects of administering the survey were consistent for all patients. We provided each participant with the same explanations and detailed instructions on how to complete each of the questionnaires.

Discussion

According to current research and recommendations, all individuals with symptomatic inguinal hernias should undergo scheduled surgical treatment. Emergency surgeries for incarcerated hernias are associated with increased risks of intra- and postoperative complications, higher mortality rates, and a significant increase in economic costs [1, 3].

At the same time, it is worth noting that, even in the absence of complications, a considerable percentage of patients with inguinal hernias experience a severe limitation of functional activity, as well as a deterioration in quality of life [2].

Modern herniology has advanced significantly, particularly in terms of optimising candidate selection for surgery, actively implementing minimally invasive surgical interventions, and modern approaches to perioperative management and patient rehabilitation. It allowed for significant progress in improving patients' quality of life and restoring functional activity after surgery.

It has become a compelling argument for expanding the indications for planned surgical procedures for inguinal hernia.

This study included anamnesis, instrumental studies, and a survey to assess quality of life, functional activity, and preoperative inguinal pain syndrome in males with inguinal hernias. We used the VAS, EQ-5D-3L, and MCCS questionnaires.

The original version of the CCS questionnaire was designed to assess the quality of life in postoperative patients who underwent anterior abdominal wall hernia repair. Since this scale is well validated for the targeted patient population, it is regarded as the preferred tool for assessing quality of life and has advantages over the traditional SF36 questionnaire, which is not specific [13]. In our study, we employed a modified version of the questionnaire to assess patients' quality of life during the preoperative period. The study found that most patients were not satisfied with their quality of life and functional capacities (32.4 ± 5.6 points).

According to the preliminary summary of the survey data, the pain syndrome was shown to be the most important factor affecting patients' quality of

Table 2. **Characteristics of patients' quality of life at the preoperative stage based on data from EQ-5D-3L questionnaire (n = 50)**

Score	Mobility	Self-care	Daily activities	Pain/Discomfort	Anxiety/Depression
1	35 (70 %)	41 (82 %)	32 (64 %)	0	36 (72 %)
2	15 (30 %)	9 (18 %)	17 (34 %)	38 (76 %)	12 (24 %)
3	0	0	1 (2 %)	12 (24 %)	2 (4 %)

life and functional activity during the preoperative period. Such findings were obtained during the survey using the EQ-5D-3L questionnaire. This questionnaire was chosen based on research indicating that it has higher construct validity and sensitivity in patients with chronic pain than the SF36 [9]. As a result, to some extent, all study patients reported having inguinal pain syndrome, the severity of which, when compared to the findings of the MCCS and VAS questionnaires, had a direct correlation with the patients' quality of life (rxy = 0.81 for the MCCS questionnaire).

The accurate identification of the etiology and nature of the pain syndrome in patients with inguinal hernias is an important component in predicting the development of chronic inguinal pain and, as a result, the quality of life of these patients in the postoperative period. This is supported by data from Forester et al.'s 2021 multivariate regression analysis of 960 individuals who underwent inguinal hernia repair [5]. The study conducted by Romain et al. in 2022 yielded comparable results, where 36.5 % of patients with chronic postoperative groin pain were diagnosed with pain syndrome persistence prior to surgery [11].

Thus, the results obtained during the study patient analysis were generally comparable to the data of foreign authors [7].

Conclusions

The «symptomatic» group of males with inguinal hernias exhibits a high level of local pain syndrome in the area of the hernia protrusion (2.1 ± 0.9 on the VAS, and 24 % of patients reported a significant degree of pain severity before planned surgical intervention (> 3 points) according to the EQ-5D-3L system). In the vast majority of cases, it significantly impairs their functional activity and quality of life (66 % of patients are not satisfied with their quality of life (32.4 ± 5.6 points on the MCCS)).

Effective local pain management is an important objective in the planned surgical treatment of inguinal hernias. This necessitates further investigation into surgical technique selection and procedure adjustments.

Prospects for further research

Further randomised clinical trials are required to determine the impact of preoperative inguinal pain syndrome on the development of chronic inguinal pain, as well as the dynamics of quality of life and functional activity in patients with inguinal hernias.

Declaration of interests

The author declares that there are no conflicts of interest.

Financing. This study did not receive additional funding through grants from financial institutions in the public, commercial, or non-commercial sectors.

References

1. Aydin M, Fikatas P, Denecke C, Pratschke J, Raakow J. Cost analysis of inguinal hernia repair: the influence of clinical and hernia-specific factors. Hernia. 2021 Oct;25(5):1129-35. doi: 10.1007/s10029-021-02372-1. Epub 2021 Feb 8. PMID: 33555463; PMCID: PMC8514365.
2. Chung L, O'Dwyer PJ. Pain and its effects on physical activity and quality of life before operation in patients undergoing elective inguinal and ventral hernia repair. Am J Surg. 2014 Sep;208(3):406-11. doi: 10.1016/j.amjsurg.2014.02.011. Epub 2014 Apr 28. PMID: 24997490.
3. Dwertmann AK, Soppe S, Hefermehl L, Keerl A, Wirsching A, Nocito A. Risk of bowel resection in incarcerated inguinal hernia: watch out for ASA score and hernia type. Langenbecks Arch Surg. 2022 Dec;407(8):3711-7. doi: 10.1007/s00423-022-02650-1. Epub 2022 Aug 17. PMID: 35974249.
4. Fitzgibbons RJ Jr, Ramanan B, Arya S, Turner SA, Li X, Gibbs JO, Reda DJ; Investigators of the Original Trial. Long-term results of a randomized controlled trial of a nonoperative strategy (watchful waiting) for men with minimally symptomatic inguinal hernias. Ann Surg. 2013 Sep;258(3):508-15. doi: 10.1097/SLA.0b013e3182a19725. PMID: 24022443.
5. Forester B, Attaar M, Chirayil S, et al. Predictors of chronic pain after laparoscopic inguinal hernia repair. Surgery. 2021 Mar;169(3):586-94. doi: 10.1016/j.surg.2020.07.049. Epub 2020 Sep 26. PMID: 32988621.
6. Huang CC, Tai FC, Chou TH, Lien HH, Jeng JY, Ho TF, Huang CS. Quality of life of inguinal hernia patients in Taiwan: The application of the hernia-specific quality of life assessment instrument. PLoS One. 2017 Aug 17;12(8):e0183138. doi: 10.1371/journal.pone.0183138. PMID: 28817703; PMCID: PMC5560705.
7. Knox RD, Berney CR. A preoperative hernia symptom score predicts inguinal hernia anatomy and outcomes after TEP repair. Surg Endosc. 2015 Feb;29(2):481-6. doi: 10.1007/s00464-014-3692-6. PMID: 25015520.
8. Mier N, Helm M, Kastenmeier AS, Gould JC, Goldblatt MI. Preoperative pain in patient with an inguinal hernia predicts long-term quality of life. Surgery. 2018 Mar;163(3):578-81. doi: 10.1016/j.surg.2017.09.055. Epub 2017 Dec 11. PMID: 29241993.
9. Obradovic M, Lal A, Liedgens H. Validity and responsiveness of EuroQol-5 dimension (EQ-5D) versus Short Form-6 dimension (SF-6D) questionnaire in chronic pain. Health Qual Life Outcomes. 2013 Jul 1;11:110. doi: 10.1186/1477-7525-11-110. PMID: 23815777; PMCID: PMC3722016.
10. PT Surg (Portuguese Collaborative Research Group). Predictors of low quality of life after open inguinal hernia repair using the EuraHS-QoL score: prospective multicentric cohort study across 33 hospitals. Hernia. 2022 Feb;26(1):225-32. doi: 10.1007/s10029-021-02498-2. Epub 2021 Nov 2. Erratum in: Hernia. 2022 Oct;26(5):1415. doi: 10.1007/s10029-022-02656-0. PMID: 34727286.
11. Romain B, Fabacher T, Ortega-Deballon P, Montana L, Cossa JP, Gillion JF; Club-Hernie Members. Longitudinal cohort study on preoperative pain as a risk factor for chronic postoperative inguinal pain after groin hernia repair at 2-year follow-up. Hernia. 2022 Feb;26(1):189-200. doi: 10.1007/s10029-021-02404-w. Epub 2021 Apr 23. PMID: 33891224.
12. Simons MP, Aufenacker T, Bay-Nielsen M, Bouillot JL, Campanelli G, Conze J, de Lange D, Fortelny R, Heikkinen T, Kingsnorth A, Kukleta J, Morales-Conde S, Nordin P, Schumpelick V, Smedberg S, Smietanski M, Weber G, Miserez M. European Hernia Society guidelines on the treatment of inguinal hernia in adult patients. Hernia. 2009 Aug;13(4):343-403. doi: 10.1007/s10029-009-0529-7. Epub 2009 Jul 28. PMID: 19636493; PMCID: PMC2719730.
13. Ujiki MB, Gitelis ME, Carbray J, et al. Patient-centered outcomes following laparoscopic inguinal hernia repair. Surg Endosc. 2015 Sep;29(9):2512-9. doi: 10.1007/s00464-014-4011-y. Epub 2014 Dec 6. PMID: 25480626.
14. Van den Heuvel B, Dwars BJ, Klassen DR, Bonjer HJ. Is surgical repair of an asymptomatic groin hernia appropriate? A review. Hernia. 2011 Jun;15(3):251-9. doi: 10.1007/s10029-011-0796-y. Epub 2011 Feb 5. PMID: 21298308.

Виразність больового синдрому, функціональна активність та якість життя чоловіків із пахвинними грижами в доопераційний період

А. В. Троц

ДНУ «Центр інноваційних медичних технологій НАН України», Київ

За даними European Hernia Society (EHS) та Hernia Surge Group (HSG), серед кандидатів на планові операції з приводу пахвинних гриж домінують чоловіки із больовим синдромом у пахвинній ділянці. Хронічний пахвинний біль на доопераційному етапі зазвичай негативно впливає на функціональну активність і якість життя пацієнтів, що є важливим аргументом на користь планової операції. За сучасними уявленнями, досягнення задовільних функціональних результатів (поліпшення показників фізичної активності) та якості життя пацієнтів після планової хірургії пахвинних гриж є таким самим важливим елементом, як і надійність анатомічної реконструкції пахвинної ділянки.

Мета — провести оцінку доопераційного пахвинного больового синдрому, функціональної активності та якості життя чоловіків із пахвинними грижами.

Матеріали та методи. Проаналізовано результати доопераційного клінічного обстеження 50 пацієнтів (чоловіків) з первинними однобічними пахвинними грижами, що перебували на лікуванні в хірургічному відділенні Державної наукової установи «Центр інноваційних медичних технологій НАН України» у період із 2018 до 2024 р. Для оцінки функціональної активності, якості життя та больового синдрому на доопераційному етапі застосовували анкетування із використанням modified Carolinas comfort scale (MCCS), Європейського опитувальника оцінки якості життя (EQ-5D-3L) та візуальної аналогової шкали (ВАШ).

Результати. Середній показник виразності больового синдрому за ВАШ становив (2,1 ± 0,9) бала. При оцінці функціональної активності пацієнтів за MCCS середній сумарний бал становив 33,7 ± 12,1, що при перерахунку становило в середньому 44,9 % та відповідало клінічній групі пацієнтів «не задоволені». При оцінці якості життя пацієнтів за EQ-5D-3L помірне обмеження мобільності відзначили 30 % пацієнтів, помірні труднощі при догляді за собою — 18 %, обмеження при заняттях повсякденною діяльністю — 34 %. Помірний рівень тривоги чи депресивних ознак виявлено в 24 % пацієнтів. Усі пацієнти відзначали наявність больового синдрому, зокрема помірний біль — 76 %, а виразний — 24 %.

Висновки. «Симптомна» група чоловіків із пахвинними грижами до виконання планового оперативного втручання характеризується значущим рівнем локального больового синдрому в ділянці грижевого випинання (2,1 ± 0,9 за ВАШ та, відповідно, 24 % пацієнтів (> 3 балів) за EQ-5D-3L)), що в більшості з них суттєво знижує функціональну активність і якість життя (66 % пацієнтів не задоволені якістю життя ((32,4 ± 5,6) бала за MCCS)). Корекція локального болю є важливим завданням планового хірургічного лікування пахвинних гриж, що потребує пошуку та оптимізації вибору методик і модифікацій операцій.

Ключові слова: пахвинна грижа, якість життя, хронічний біль, функціональний статус.

FOR CITATION

Trots AV. Severity of pain syndrome, functional activity, and quality of life in male patients with inguinal hernias in the preoperative period. General Surgery (Ukraine). 2024:(3);37-42. http://doi.org/10.30978/GS-2024-3-37.