Bogomaz Volodymyr, Starodub Tetiana. Postoperative management of patients after laparoscopic cholecystectomy. Journal of Education, Health and Sport. 2025;86:68062. eISSN 2391-8306. https://dx.doi.org/10.12775/JEHS.2025.86.68062
https://apcz.umk.pl/JEHS/article/view/68062
https://zenodo.org/records/18188013

The journal has had 40 points in Minister of Science and Higher Education of Poland parametric evaluation. Annex to the announcement of the Minister of Education and Science of 05.01.2024 No. 32318. Has a Journal's Unique Identifier: 201159. Scientific disciplines assigned: Physical culture sciences (Field of medical and health sciences);
Health Sciences (Field of medical and health sciences). Punkty Ministerialne 40 punktów. Załącznik do komunikatu Ministra Nauki i Szkolnictwa Wyższego z dnia 05.01.2024 Lp. 32318. Posiada Unikatowy Identyfikator Czasopisma: 201159. Przypisane dyscypliny naukowe: Nauki o kulturze fizycznej (Dziedzina nauk medycznych i nauk o zdrowiu); Nauki o zdrowiu (Dziedzina nauk medycznych i nauk o zdrowiu).© The Authors 2025;
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The authors declare that there is no conflict of interests regarding the publication of this paper.
Received: 03.11.2025. Revised: 14.11.2025. Accepted: 28.11.2025. Published: 26.12.2025.

Postoperative management of patients after laparoscopic cholecystectomy

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Abstract

Introduction and purpose: laparoscopic cholecystectomy is the standard treatment for symptomatic cholelithiasis; however, a substantial proportion of patients continue to experience abdominal pain and dyspeptic symptoms after surgery, which requires structured postoperative follow-up. Telemedicine is increasingly used for postoperative monitoring, but data on its effectiveness and safety after cholecystectomy remain limited. The purpose of this study was to evaluate the effectiveness and safety of telemedicine-based postoperative follow-up compared with conventional outpatient care.

Material and method: this prospective study included 156 patients who underwent laparoscopic cholecystectomy for gallstone disease in two medical centers in Ukraine during 2023–2025. Patients were allocated into a telemedicine follow-up group (n = 77) and a conventional outpatient follow-up group (n = 79). Postoperative assessment was conducted at

1 and 6 months using a structured questionnaire evaluating overall well-being, abdominal pain, dyspeptic symptoms, physical activity, and appetite.

Results: one month after surgery, symptoms were reported by 51.9% of patients, including abdominal pain in 21.2% of cases, predominantly mild or moderate. The most common complaints were abdominal bloating, heartburn, postprandial fullness, nausea after fatty food intake, and loose stools. At six months, the proportion of symptomatic patients decreased to 34.0%, and abdominal pain persisted in 9.6% of patients, mainly mild. Dyspeptic symptoms became less frequent. No postoperative complications or readmissions were recorded, and no significant differences were observed between follow-up groups ($p > 0.05$).

Conclusions: telemedicine-based postoperative monitoring after laparoscopic cholecystectomy provides clinical outcomes comparable to conventional outpatient follow-up and may be considered an appropriate option for routine follow-up after uncomplicated surgery.

Key words: Cholecystectomy; Telemedicine; Cholelithiasis; Postoperative Care; Abdominal pain; Dyspepsia.

Introduction

Gallstone disease (GSD) is one of the most common gastrointestinal disorders worldwide. According to a meta-analysis of 115 studies involving 32,610,568 participants, the overall prevalence of cholelithiasis was 6.1% (95% CI, 5.6–6.5) (Wang et al., 2024). In Europe, population-based ultrasound surveys demonstrate a wide range of gallstone disease prevalence, from 5.9% to 21.9%, while the EASL clinical practice guidelines indicate that up to 20% of the population in developed countries may be affected by gallstone disease (Gyedu et al., 2015). Currently, no up-to-date population-based data on the prevalence of gallstone disease in Ukraine are available in the accessible scientific literature.

Cholecystectomy (CE) is the definitive treatment for symptomatic cholelithiasis and may be performed using either open or laparoscopic surgery. The laparoscopic approach is recommended due to lower postoperative mortality, shorter hospital stay, reduced complication rates, and faster recovery (Soper & Malladi, 2023). In Europe, approximately 900,000 CE procedures are performed annually (Abdallah et al., 2025). Over the past decade, the number of CE performed for acute and chronic calculous cholecystitis in the adult population of Ukraine has ranged from 30.6 to 58.2 thousand procedures per year. When

calculated per 100,000 population, this indicator reached a peak value of 160.5 per 100,000 in 2023 (Bogomaz & Starodub, 2025).

Although CE is associated with a high rate of clinical success, a substantial proportion of patients - estimated in some studies to be up to 40% - continue to experience abdominal symptoms after surgery (Saleem et al., 2021). According to a study conducted in the Netherlands, 36.5% of patients reported persistent abdominal pain six months after CE. Other symptoms, including bloating (17.8%) and dietary restrictions (14.5%), also persisted, while new postoperative symptoms included increased stool frequency (9.6%), urgency of defecation (8.5%), and diarrhea (8.4%) (Thunnissen et al., 2023). According to the study by Lee et al., persistent abdominal pain was present in 29% of patients twelve months after surgery (Lee et al., 2023). In our observations, 25% of patients experienced intermittent mild to moderate abdominal pain one month after successful CE (Bogomaz & Starodub, 2025).

Postoperative follow-up is a critical component of patient management after CE, as it enables the timely identification and management of both early and late postoperative complications (Kazi et al., 2025). Active postoperative follow-up facilitates the prompt initiation of additional diagnostic evaluations, dietary counseling, pharmacological therapy, or referral to other specialists, thereby contributing to improved patient quality of life (Tu et al., 2025).

According to scientific evidence, remote follow-up of patients after CE is sufficiently reliable and effective. No statistically significant differences were identified in complication rates, hospitalizations, or emergency department visits between telemedicine-based follow-up and standard postoperative care groups (Abbitt et al., 2023). A systematic review and meta-analysis demonstrated that telemedicine is a safe and effective tool in postoperative management, as it does not increase the risk of complications while reducing the rate of readmissions (RR 0.67; 95% CI 0.47 - 0.94) and emergency department visits (RR 0.78; 95% CI 0.65 - 0.94). At the same time, the effectiveness of telemedicine was shown to depend largely on the quality of the digital platform, the level of staff training, and patient engagement (Grygorian et al., 2024).

The use of digital platforms reduces the burden on inpatient healthcare facilities and improves the efficiency of the healthcare system. In a study including 597 patients after laparoscopic CE, the digital follow-up group demonstrated a significantly lower rate of missed consultations compared with conventional follow-up (Daliya et al., 2022).

Global trends supporting the advantages of telemedicine in postoperative patient care remain insufficiently studied within the Ukrainian healthcare system. There is a clear

scientific and practical need to evaluate the effectiveness and safety of telemedicine-based follow-up after CE, one of the most frequently performed surgical procedures in Ukraine, taking into account local infrastructure, patient demographic characteristics, and the specific features of the national healthcare system.

Research materials and methods

The study included 156 patients who underwent laparoscopic CE for gallstone disease during 2023–2025. Patients were allocated into two groups according to the method of postoperative follow-up. The primary tool of telemedicine-based follow-up in the main group was an online patient questionnaire administered via the Google Forms platform at predefined time points—1, 6, and 12 months after laparoscopic CE. Patients in the control group received conventional outpatient follow-up, which included the same questionnaire administered in paper form during face-to-face physician visits at the same point.

Patients with a confirmed primary clinical diagnosis of gallstone disease were included in the study. Exclusion criteria were choledocholithiasis, obstructive jaundice, pregnancy, conversion to open CE, early postoperative complications, severe concomitant diseases in the stage of decompensation, and malignant neoplasms.

Statistical analysis was performed using descriptive statistical methods. Quantitative variables are presented as median and interquartile range (Me [Q1 - Q3]), while qualitative variables are presented as absolute and relative frequencies (n, %). Comparisons of quantitative variables between two independent groups were performed using the nonparametric Wilcoxon rank-sum test. Comparisons of categorical variables between groups were conducted using Pearson's χ^2 test, and Fisher's exact test was applied when expected cell counts were <5. Differences were considered statistically significant at a p-value <0.05. Statistical analyses were performed using MedStat software (version 5.2) and EZR software (version 4.1.2).

The study was reviewed and approved by the Commission on Bioethical Expertise and Research Ethics of Bohomolets National Medical University (Protocol No. 195 dated May 26, 2025). The study was conducted in full accordance with the ethical principles outlined in the Declaration of Helsinki (2013 revision). Personal data were anonymized and handled confidentially.

In this study, artificial intelligence (AI) was used to assist in improving the academic English of the manuscript, ensuring clarity, consistency, and adherence to standards of scientific writing. AI tools were also employed for additional linguistic refinement of the research manuscript to ensure correct English grammar, style, and clarity in the presentation

of results. It is important to emphasize that all artificial intelligence tools were used exclusively as assistive instruments under human supervision. The final interpretation of results, classification of errors, and formulation of conclusions were carried out by expert specialists in clinical medicine and formal logic. AI tools primarily served to linguistically refine, rather than to replace human judgment in the analytical process.

Research results

A total of 156 patients were included in the study. The majority of participants were women - 111 patients (71.1%) - and 45 were men (28.8%), reflecting the well-known sex-related differences in the prevalence of gallstone disease. The median age of the overall cohort was 52 (39–60) years, with an age range of 21 - 74 years. The median age (QI - QIII) was 48 (39 - 57) years for men and 52 (39 - 60) years for women. No statistically significant difference was found between the median ages of male and female participants.

According to the method of postoperative follow-up, patients were divided into two groups: 79 patients received conventional outpatient follow-up (control group), and 77 patients received remote telemedicine-based follow-up (telemedicine group). Each group included a comparable number of patients from both participating medical institutions. The telemedicine group comprised 56 women and 21 men, with a median age (QI - QIII) of 53 (39 - 59) years. The control group included 55 women and 24 men, with a median age (QI - QIII) of 48 (39 - 60) years. No statistically significant difference in age was observed between the groups ($p > 0.05$).

The median postoperative length of hospital stay was 2 days in both groups, with no statistically significant difference between them ($p > 0.05$). The duration of hospitalization ranged from 1 to 8 days: 73 patients stayed for 1 bed-day, 34 for 2 bed-days, 20 for 3 bed-days, 19 for 4 bed-days, 3 for 5 bed-days, 3 for 6 bed-days, 3 for 7 bed-days, and 1 for 8 bed-days. Before surgery, biochemical blood parameters were assessed in all patients. No statistically significant differences were identified between the telemedicine and control groups for any of the evaluated parameters.

Overweight or obesity was present in 75.6% of patients (74.8% of women and 77.8% of men). A detailed distribution is presented in Table 1.

A preoperatively confirmed diagnosis of type 2 diabetes mellitus was present in 10 patients (8 women and 2 men), including 7 patients in the control group and 3 patients in the telemedicine group. Overall, baseline demographic characteristics were comparable between the two groups, allowing for valid comparison of follow-up outcomes.

Table 1. Distribution of patients according to body mass index

BMI category (BMI kg/m²)	Total, n (%)	Women, n (%)	Men, n (%)	Control group, n (%)	Telemedicine group, n (%)
Overweight (25.0–29.9)	57 (36.5%)	41 (36.9%)	16 (35.6%)	31 (39.2%)	26 (33.8%)
Obesity class I (30.0–34.9)	34 (21.8%)	25 (22.5%)	9 (20.0%)	15 (19.0%)	19 (24.7%)
Obesity class II (35.0–39.9)	14 (9.0%)	8 (7.2%)	6 (13.3%)	7 (8.9%)	7 (9.1%)
Obesity class III (≥40.0)	13 (8.3%)	9 (8.1%)	4 (8.9%)	5 (6.3%)	8 (10.4%)

One month after CE, the majority of patients in the overall cohort reported substantial improvement in well-being and recovery of daily activities. Specifically, 60.9% of patients rated their general well-being as “returned to normal” or “almost returned to normal.” In addition, 25% reported feeling “better than before surgery.” Approximately 14% of patients indicated worse well-being compared with the preoperative state, predominantly within the category “worse but improving” (12.8%), while 1.3% reported that their condition was “worse and not improving.” (Table 2)

Table 2. Distribution of responses to the question “How would you rate your overall well-being after surgery?” one month after CE

Response category	Control group, n (%)	Telemedicine group, n (%)	Total sample, n (%)
Returned to normal	28 (35.4%)	23 (29.9%)	51 (32.7%)
Almost returned to normal	19 (24.1%)	25 (32.5%)	44 (28.2%)
Better than before surgery	18 (22.8%)	21 (27.3%)	39 (25.0%)
Worse than before surgery, but improving	13 (16.5%)	7 (9.1%)	20 (12.8%)
Worse than before surgery, and not improving	1 (1.3%)	1 (1.3%)	2 (1.3%)

69.3% of patients resumed light or moderate physical activity, while 13.5% reported no limitations in physical activity. At the same time, a proportion of respondents continued to experience restrictions: approximately 11.5% were able to perform only minimal household activities, and 5.8% were forced to limit even basic mobility (Table 3).

Table 3. Distribution of responses to the question "What is your current level of physical activity?" one month after CE

Response option	Control group, n (%)	Telemedicine group, n (%)	Total sample, n (%)
Moderate physical activity	25 (31.6%)	33 (42.9%)	58 (37.2%)
Light physical activity	24 (30.4%)	26 (33.8%)	50 (32.1%)
Physical activity without limitations	14 (17.7%)	7 (9.1%)	21 (13.5%)
Able to perform only minimal household activities	11 (13.9%)	7 (9.1%)	18 (11.5%)
Limited mobility	5 (6.3%)	4 (5.2%)	9 (5.8%)

No patients exhibited signs of surgical site infection at the 1-month follow-up. No cases of postoperative jaundice were recorded.

At the 1-month postoperative assessment, 51.9% of all patients reported the presence of one or more complaints in an open-ended question (33.3% reported no complaints, and 14.7% did not provide a response to this question). The most common gastrointestinal complaints included episodic abdominal bloating and heartburn, reported by 23.1% of patients; nausea after consumption of fatty foods (10.9%); changes in bowel habits, including frequent or loose stools (9.0%); and right upper quadrant abdominal pain (9.0%) (Table 4).

Table 4. Structure of patient complaints at 1 month after CE

Response option	Control group, n (%)	Telemedicine group, n (%)	Total sample, n (%)
No complaints	31 (39.2%)	21 (27.3%)	52 (33.3%)
Episodic bloating and heartburn	18 (22.8%)	18 (23.4%)	36 (23.1%)
Nausea after fatty food intake	9 (11.4%)	8 (10.4%)	17 (10.9%)
Mild right upper quadrant pain	7 (8.9%)	7 (9.1%)	14 (9.0%)
Loose stools	6 (7.6%)	8 (10.4%)	14 (9.0%)
No response	8 (10.1%)	15 (19.5%)	23 (14.7%)

The majority of patients - 123 individuals (78.8%) - reported no abdominal pain. The remaining 33 patients (21.2%) experienced abdominal pain: 22 patients (14.1%) reported mild pain, 5 patients (3.8%) reported moderate pain, and 6 patients (3.8%) reported severe or very severe pain. The most common localization of postoperative pain was the right upper

quadrant, reported by 18 patients (11.5%), corresponding to the site of the surgical intervention. Some patients described diffuse abdominal discomfort (5 patients, 3.2%) or epigastric pain (3 patients, 1.9%). Thus, by the end of the first month after CE, nearly one in five patients experienced abdominal pain, predominantly of mild to moderate intensity.

Dyspeptic symptoms were more frequently reported. Nausea was noted by 14 respondents (8.8%), heartburn by 24 patients (15.0%), abdominal bloating by 34 patients (21.2%), and a sensation of postprandial gastric fullness by 30 patients (18.8%). Acid or bitter regurgitation was reported by 14 patients (8.9%), air belching by 33 patients (21.1%), and abdominal rumbling by 25 patients (15.6%). Night-time or hunger-related epigastric pain was reported by 22 patients (14.1%). During the first postoperative month, appetite was reduced in 32 patients (20.5%), absent in 7 patients (4.5%), and increased in 7 patients (4.5%).

Weight loss was reported by 5 patients (3.2%). Thus, by the end of the first postoperative month, a substantial proportion of patients experienced moderate dyspeptic symptoms, including bloating, belching, and heartburn. Only 33.1% of respondents reported no complaints at the time of this assessment. No cases of readmission or complications requiring intensive treatment were recorded. No statistically significant differences in symptom frequency were observed between the telemedicine and control groups at 1 month after surgery ($p > 0.05$).

At 6 months after CE, further improvement in patients' condition and return to a usual lifestyle were observed. The majority of respondents reported that their overall well-being had returned to normal or that their health status was better than before surgery. Specifically, 60.9% of patients in the overall cohort rated their general well-being as "returned to normal" or "almost returned to normal," which was identical to the proportion observed at 1 month after surgery (60.9%). At the same time, the proportion of patients who reported feeling better than before surgery increased substantially to 35.3% (compared with 25.0% at 1 month). Only approximately 4% of patients reported worse well-being than before surgery at 6 months, predominantly within the category "worse but improving" (2.6%), while 1.3% continued to report that their condition was "worse and not improving."

Six months after surgery, the vast majority of patients had returned to normal physical activity or at least to a moderate level of physical exertion. In particular, 77.5% of patients in the overall sample engaged in moderate physical activity or had no activity limitations, compared with 69.3% at one month after surgery. No restrictions on physical activity were reported by 47.4% of patients, which was several times higher than at one month postoperatively (13.5%). An additional 14.7% of respondents reported performing only light

physical activities at six months. A small proportion of patients (7.7%) continued to experience significant activity limitations six months after CE: 7.1% were able to perform only minimal household activities, and 0.6% remained limited in mobility.

Table 5. Distribution of responses to the question "How would you rate your overall well-being after surgery?" six months after CE

Response option	Control group, n (%)	Telemedicine group, n (%)	Total sample, n (%)
Returned to normal	36 (45,6%)	42 (54,5%)	78 (50,0%)
Almost returned to normal	9 (11,4%)	8 (10,4%)	17 (10,9%)
Better than before surgery	31 (39,2%)	24 (31,2%)	55 (35,3%)
Worse than before surgery, but improving	3 (3,8%)	1 (1,3%)	4 (2,6%)
Worse than before surgery, without improvement	0 (0,0%)	2 (2,6%)	2 (1,3%)

At the follow-up assessment six months after CE, only 34.0% of patients in the overall sample reported the presence of clinical complaints, compared with 51.9% at one month postoperatively. In contrast, 66.0% of patients were asymptomatic at the six-month follow-up, compared with only 33.3% without complaints at one month after surgery. At six months, dyspeptic symptoms were the most frequently reported complaints; however, their prevalence was markedly lower than during the early postoperative period. Specifically, episodic abdominal bloating was reported by 14.7% of patients, mild heartburn by 7.7%, nausea after consumption of fatty foods by 6.4%, and loose stools by 5.1% of respondents.

The majority of patients - 141 individuals (90.4%) - reported no abdominal pain at the six-month follow-up. Abdominal pain was reported by 15 patients (9.6%): mild pain in 12 patients (7.7%), moderate pain in 2 patients (1.3%), and severe pain in only 1 patient (0.6%). The most common pain localization remained the right upper quadrant; however, a small number of patients reported pain in other abdominal regions, including diffuse abdominal pain and epigastric pain. At six months, dyspeptic symptoms were considerably less prevalent compared with the previous assessment. Nausea was reported by 18 patients (11.5%), heartburn by 12 (7.7%), abdominal bloating by 11 (7.1%), a sensation of postprandial gastric fullness by 12 (7.7%), sour or bitter belching by 9 patients (5.8%), air belching by 11 (7.1%), abdominal rumbling by 17 (10.9%), and nocturnal or fasting-related epigastric pain by 12

patients (7.7%). Overall, the frequency of dyspeptic symptoms in the total sample decreased by twofold or more at six months after CE compared with the assessment conducted one month after surgery.

Differences in the prevalence of complaints between the intervention and control groups at the six-month follow-up were not statistically significant. A trend toward better outcomes was observed in the control group: a slightly higher proportion of patients were asymptomatic (approximately 71% vs. 61% in the intervention group), and abdominal pain at six months was reported less frequently in the control subgroup (approximately 5% vs. 14% in the intervention group). Individual dyspeptic symptoms (e.g., abdominal bloating and loose stools) were also reported somewhat more often in the intervention group; however, the overall prevalence of these symptoms remained low in both subgroups. Overall, no statistically significant differences in the frequency of symptoms or complications were identified between the two groups at six months after CE ($p > 0.05$).

In patients from both study groups who experienced persistent or progressive symptoms, additional diagnostic evaluation was required. A complete blood count and assessment of biochemical parameters (alanine aminotransferase, aspartate aminotransferase, alkaline phosphatase, and bilirubin) were performed. In addition, abdominal ultrasound was conducted to exclude postoperative biliary tract changes, dilation of the common bile duct, residual choledocholithiasis, or other structural causes of symptoms. The results of these investigations facilitated optimization of subsequent patient management. No signs of surgical complications or indications for repeat hospitalization were identified based on the diagnostic findings.

During the observation period, none of the patients expressed dissatisfaction with the absence of in-person physician visits in the remote follow-up group. No statistically significant differences were identified between the intervention and control groups in postoperative clinical manifestations over the six-month follow-up period, indicating that remote management did not introduce additional risks of medical errors. Based on these findings, it can be concluded that transitioning to remote follow-up and consultation is feasible for the majority of patients after CE. This approach may help optimize physicians' time and improve convenience for patients.

Discussion

The obtained results indicate a gradual improvement in overall well-being and a reduction in the frequency of clinical complaints in the majority of patients during the first six months after laparoscopic CE, regardless of the format of postoperative follow-up. At the

same time, the persistence of abdominal pain and dyspeptic symptoms in a subset of patients confirms that gastrointestinal symptoms may continue for a prolonged period even after technically successful surgery. Importantly, none of the patients in our sample required repeat surgical intervention or rehospitalization, which is consistent with existing evidence on the overall safety of laparoscopic CE (Soper & Malladi, 2023; Kazi et al., 2025).

The study results should be interpreted considering the exclusion criteria. Patients with complicated gallstone disease, choledocholithiasis, obstructive jaundice, or early postoperative complications were not included in the analysis. Therefore, telemedicine follow-up was evaluated in a relatively stable cohort of patients after uncomplicated laparoscopic CE. Patients who develop complications before or immediately after surgery should be recommended for in-person follow-up by a surgeon. The persistence of dyspeptic symptoms in the absence of structural biliary abnormalities and laboratory abnormalities is likely associated with functional gastrointestinal disorders or comorbid conditions that may have remained unrecognized prior to surgery. Such conditions may include functional dyspepsia, gastroesophageal reflux disease, and irritable bowel syndrome, as well as organic pathologies, including peptic ulcer disease or chronic pancreatitis (Saleem et al., 2021; Thunnissen et al., 2023).

In our study, additional laboratory testing and ultrasound examinations in patients with persistent symptoms did not reveal any surgical causes of the reported complaints, highlighting the need for a multidisciplinary approach to the management of such patients. Further investigation is warranted into the role of the gut microbiome in the development of symptoms after CE. Alterations in bile flow and the effects of perioperative antibiotic therapy may contribute to dysbiotic changes, which could potentially influence the development of functional gastrointestinal disorders. This area is considered a promising direction in current research and may have practical implications for optimizing postoperative management strategies.

Conclusions

Traditional in-person follow-up and telemedicine-based monitoring after laparoscopic CE demonstrated statistically comparable outcomes, showing a gradual return of overall well-being to normal or a marked improvement over time. At the same time, at six months after surgery, dyspeptic symptoms persisted in approximately one third of patients, and mild to moderate abdominal pain was reported by 9.6% of patients. The mode of postoperative follow-up did not have a statistically significant impact on differences between the

intervention and control groups with regard to overall well-being, frequency of complaints, abdominal pain, or dyspeptic symptoms at either one or six months of follow-up ($p > 0.05$).

Taking into account the exclusion criteria applied in this study, telemedicine follow-up may be recommended as an effective and safe alternative to the traditional postoperative monitoring algorithm for patients after laparoscopic CE.

Future studies on this topic may focus on investigating the underlying causes of persistent digestive disorders in patients after CE. Larger sample sizes and the application of additional diagnostic tests are required to estimate the prevalence of different functional gastrointestinal disorders, assess the consequences of perioperative antibiotic therapy, and identify other potential causes of dyspeptic and pain syndromes. The potential of remote patient follow-up, particularly for the early detection of persistent or newly emerging postoperative symptoms, also warrants investigation in other types of surgical interventions. The integration of remote video or photographic monitoring of postoperative wounds with specialized patient-reported outcome questionnaires may be considered promising medical technology, facilitating timely patient assessment and prompt response to possible postoperative complications.

Author's contribution

Conceptualization: Starodub Tetiana (ORCID: 0009-0004-8220-9947); Bogomaz Volodymyr (ORCID: 0000-0003-1493-6558); Methodology: Bogomaz Volodymyr; Validation: Starodub Tetiana; Formal Analysis: Starodub Tetiana; Investigation: Starodub Tetiana, Bogomaz Volodymyr; Resources: Bogomaz Volodymyr; Data Curation: Starodub Tetiana; Writing – Original Draft Preparation: Starodub Tetiana; Writing – Review & Editing: Bogomaz Volodymyr; Visualization: Starodub Tetiana; Supervision: Bogomaz Volodymyr; Project Administration: Bogomaz Volodymyr.

All authors have read and approved the final version of the manuscript.

Funding

This research received no external funding.

Institutional Review Board Statement

The study was reviewed and approved by the Commission on Bioethical Expertise and Research Ethics of Bohomolets National Medical University (Protocol No. 195 dated May 26, 2025). The study was conducted in full accordance with the ethical principles outlined in the Declaration of Helsinki (2013 revision). Personal data was anonymized and handled confidentially.

Informed Consent Statement

Informed consent was obtained from all subjects involved in the study.

Conflict of interests

The authors declare no conflict of interests.

AI Disclosure

The authors used ChatGPT 5.2 (OpenAI, San Francisco, CA, USA) for language editing of the English text. The authors reviewed and verified all AI-generated content to ensure accuracy and integrity.

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