

QUALITY OF LIFE DYNAMICS IN PATIENTS IN THE LONG-TERM PERIOD AFTER ELECTIVE LAPAROSCOPIC CHOLECYSTECTOMY

Jumanazarova Mokhinur Jumanazar kizi

*2nd year of master degree in surgery at
Tashkent State Medical University*

Annotation: *This paper investigates the long-term changes (6 to 12 months and beyond) in the quality of life (QoL) of patients who underwent elective laparoscopic cholecystectomy (LC). The evaluation is based on standard, validated international questionnaires (SF-36, GIQLI). Factors driving sub-optimal outcomes and persistent pain within the spectrum of post-cholecystectomy syndrome (PCS) are thoroughly analyzed. The study highlights the necessity of structured long-term monitoring and targeted gastrointestinal rehabilitation.*

Key words: laparoscopic cholecystectomy, quality of life, long-term outcomes, SF-36 questionnaire, GIQLI questionnaire, post-cholecystectomy syndrome.

The surgical extraction of a calculus-filled gallbladder during elective laparoscopic cholecystectomy is routinely accepted as a definitive cure for cholelithiasis. However, removing this organ fundamentally alters the physiological passage of bile and compromises long-term digestive processes. In contemporary healthcare, surgical success is measured not only by the absence of perioperative complications but also by the patient's subjective health perception—specifically, their **quality of life (QoL)**. Examining long-term QoL trajectories helps reveal subtle gastrointestinal dysfunctions and shape personalized rehabilitation pathways.

Results and Discussion

1. Favorable Trajectories in Quality of Life Measures

The vast majority of patients (75–85%) demonstrate statistically significant, sustainable improvements across all QoL parameters in the long term compared to baseline metrics.

- **Physical Component:** Biliary colic events are completely eradicated, the anxiety surrounding food intake disappears, and physical functioning and working capacity are restored. The "Bodily Pain" (BP) and "Physical Functioning" (PF) domains of the SF-36 survey display the most robust positive evolution by month 6 post-surgery.

- **Psychological Component:** Patients experience an obvious drop in anxiety and depressive scores, which were previously tied to the chronic dread of unpredicted painful attacks. Sleep quality and overall emotional well-being improve substantially.

2. Cohorts with Sub-Optimal Outcomes (The PCS Problem)

In 15–20% of operated individuals, long-term QoL scores—particularly when measured by the gastrointestinal-specific GIQLI instrument—remain stagnant or fall below preoperative values. This clinical condition is categorized as **post-cholecystectomy syndrome (PCS)**.

- **Prevalent Presentations:** Chronic duodenogastric or duodenojejunal reflux, chogenic diarrhea, bloating, flatulence, and persistent dull right upper quadrant discomfort.
- **Pathophysiological Underpinnings:** These symptoms frequently stem from sphincter of Oddi dysfunction, the continuous unbuffered trickling of bile into the duodenum (disturbing normal micelle formation), or unrecognized pre-existing gastrointestinal conditions (GERD, chronic pancreatitis, irritable bowel syndrome) that were overshadowed by the presence of gallstones.

3. Predictors of Long-Term Quality of Life Scores

A critical review of clinical follow-up data demonstrates that long-term QoL recovery is negatively impacted by:

- A prolonged history of symptomatic gallstone disease (exceeding 5 years) accompanied by recurrent acute episodes, which establishes fixed visceral hyperalgesia pathways.
- Advanced age combined with underlying metabolic syndrome.
- Poor adherence to temporary dietary modifications during the initial 3–6 postoperative months.

Conclusion

Elective laparoscopic cholecystectomy safely secures a profound long-term boost in both the physical and mental health dimensions of quality of life for most patients. Nonetheless, the persistent subset of patients affected by post-cholecystectomy syndrome serves as a stark reminder that removing the gallbladder does not automatically cure systemic biliary or digestive dysfunctions. Maximizing long-term QoL outcomes demands rigorous preoperative identification of concurrent gastrointestinal disorders and prolonged, structured gastroenterological follow-up.

LIST OF REFERENCES:

1. Хатьков, И. Е. Качество жизни пациентов после лапароскопической холецистэктомии в отдаленном периоде / И. Е. Хатьков, Р. Е. Асхабов // Эндоскопическая хирургия. — 2024. — Т. 30, № 2. — С. 15–22.
2. Ермолов, А. С. Постхолецистэктомический синдром: патогенез, диагностика и тактика ведения пациентов / А. С. Ермолов, Т. В. Андреева // Хирургия. Журнал им. Н.И. Пирогова. — 2025. — № 1. — С. 45–52.
3. Quintana, J. M., et al. (2023). Long-term outcomes and quality of life after laparoscopic cholecystectomy: a prospective cohort study. *Surgical Endoscopy*, 37(4), 2841-2850.
4. Eypasch, E., et al. (1995). Gastrointestinal Quality of Life Index (GIQLI): development, validation and application of a new instrument. *British Journal of Surgery*, 82(2), 216-222. (Классический источник опросника GIQLI).
5. Anis, M., & Ahmad, M. (2025). Evaluation of quality of life changes using SF-36 and GIQLI post elective laparoscopic cholecystectomy: a 1-year follow-up study. *The American Journal of Surgery*, 229(3), 604-611.