Website:https://worldsiencepub.com/index.php/Imc Volume:5,Issue 02,September-2026

EARLY POSTOPERATIVE COMPLICATIONS IN RADICAL CYSTECTOMY WITH BRICKER ILEAL CONDUIT UNDER THE ENHANCED RECOVERY AFTER SURGERY (ERAS) PROTOCOL

Khafizov D.A., **Esankulova B.S.**, PhD
Samarkand State Medical University

Background. Radical cystectomy with pelvic lymph node dissection remains the standard surgical management for muscle-invasive and recurrent high-risk non-muscle-invasive bladder cancer. Despite improvements in surgical technique and anesthetic management, this procedure remains one of the most traumatic in oncourology: early (up to 30 days) postoperative complication rates reach 60–70% according to literature data, while the incidence of grade III and higher complications according to the Clavien-Dindo classification ranges from 15% to 25%. Urinary diversion via the Bricker method (ileal conduit) is primarily performed in elderly and senile patients with significant comorbidities, reduced physiological reserve, and a high Charlson Comorbidity Index. This makes this cohort particularly susceptible to postoperative complications such as paralytic ileus, anastomotic leakage (entero-enteric and ureteroileal), wound infection, lymphorrhea, thromboembolic events, and metabolic disorders. The Enhanced Recovery After Surgery (ERAS) protocol, which integrates a set of preoperative, intraoperative, and postoperative interventions (avoidance of routine mechanical bowel preparation, shortened preoperative fasting, preoperative carbohydrate loading, multimodal analgesia with opioid minimization, PONV prophylaxis, early mobilization, and early enteral nutrition), has demonstrated efficacy in colorectal surgery; however, its outcomes in radical cystectomy remain controversial, and reports on an isolated cohort of patients with an ileal conduit are limited.

Objective. To evaluate the impact of the ERAS protocol on the incidence, structure, and severity of early postoperative complications, as well as on functional recovery timelines in patients undergoing radical cystectomy with Bricker urinary diversion.

Materials and Methods. The study included patients who underwent radical cystectomy with Bricker ileal conduit for bladder cancer. Patients were divided into two groups: the control group (standard perioperative care) and the study group (ERAS protocol). Groups were comparable in terms of gender, age, disease stage, body mass index, and comorbidity profile. Evaluated outcomes included: incidence and structure of complications according to the Clavien-Dindo classification at 30 and 90 days; time to return of bowel sounds, passage of flatus, and first bowel movement; time to nasogastric tube and drain removal; opioid analgesic requirements; length of hospital stay; and 30-day readmission rate. Statistical analysis was performed using non-parametric methods (Mann-Whitney U test, Chi-square test) with a significance threshold of $p < 0.05$.

Results. A statistically significant reduction in the time to return of bowel peristalsis and first bowel movement was observed in the ERAS group compared with the standard care group. The incidence of Clavien-Dindo grade I–II complications (primarily paralytic ileus and surgical site infections) was lower in the ERAS group, whereas no significant differences were found between the groups regarding severe complications (grade III and higher) requiring reoperation. The length of hospital stay was significantly shorter in the ERAS group, with a comparable 30-day readmission rate.

Discussion. The findings align with international reports demonstrating the efficacy of ERAS in accelerating functional recovery while maintaining a comparable safety profile. However, the lack of significant impact on high-grade complications emphasizes the need for further risk-stratification of patients and potential individualization of specific protocol components for patients undergoing ileal conduit diversion.

Conclusions. Implementation of the ERAS protocol in radical cystectomy with Bricker ileal conduit is associated with a reduced rate of minor early postoperative complications, accelerated gastrointestinal recovery, and decreased length of hospital stay without increasing severe morbidity or readmission rates, supporting its feasibility and routine integration into oncourological practice.

© 2026 International Conference on Artificial Intelligence and Applications . All Rights Reserved.

Keywords: bladder cancer; radical cystectomy; ileal conduit; Bricker procedure; urinary diversion; Enhanced Recovery After Surgery (ERAS).

© 2026 International Conference on Artificial Intelligence and Applications . All Rights Reserved.