

Quality of Life Analysis in Patients with Simple Cutaneous Ureterostomy versus Ileal Conduit Bricker Following Radical Cystectomy

Cosmin-George Radu^{1,2}, George Daniel Rădăvoi^{1,2}, Justin Aurelian^{1,2}, Ion-Florin Achim^{1,3}, Iulia Andras⁴, Maximilian Buzoianu⁴, Elisabeta Ioana Hiriscu⁴, Nicolae Crisan⁴, Silviu Constantinoiu^{1,3}, Viorel Jinga^{1,2,5}

¹Carol Davila University of Medicine and Pharmacy, Bucharest, Romania

²Department of Urology, Prof. Dr. Th. Burgele Clinical Hospital, Bucharest, Romania

³Department of Surgery, General and Esophageal Surgery Clinic, Sfanta Maria Clinical Hospital, Bucharest, Romania

⁴Department of Urology, Iuliu Haăeganu University of Medicine and Pharmacy, Cluj-Napoca, Romania

⁵Medical Sciences Section, Academy of Romanian Scientists, Bucharest, Romania

Abstract

Introduction: Radical cystectomy (RC) with pelvic lymphadenectomy remains the standard therapeutic approach in the treatment of muscle-invasive bladder cancer (MIBC). The impact of urinary diversion type on postoperative health-related quality of life (HRQoL) remains a debated topic, especially in the context of Eastern European clinical practice. **Objective:** This retrospective, observational, multicentric study aimed to compare the quality of life in patients undergoing RC followed by either simple cutaneous ureterostomy (SCU) or non-continent ileal conduit (Bricker), across two academic centers in Romania, utilizing different surgical approaches.

Material and Methods: A total of 46 patients diagnosed with non-metastatic MIBC were included and equally distributed into two groups. Quality of life was assessed at 3 months postoperatively using the EQ-5D-5L questionnaire and the EQ-VAS visual analogue scale. Indexed scores were calculated using a European value set. A multivariate linear regression was applied to identify independent predictors of quality of life scores.

Results: Patients in the Bricker group reported slightly higher EQ-VAS scores. Paradoxically, social support was associated with lower indexed scores ($p < 0.001$), suggesting more severe functional impairment among patients requiring assistance. The type of surgical approach did not significantly impact quality of life. Male patients reported greater limitations in self-care and daily activities ($p < 0.05$).

Conclusions: Both urinary diversion techniques yield comparable quality of life outcomes at 3 months postoperatively. Social support may serve as an indirect marker of functional vulnerability, emphasizing the need for an individualized and multidisciplinary approach.

Keywords: radical cystectomy, urinary diversion, simple cutaneous ureterostomy, ileal conduit (Bricker technique), quality of life, social support, EQ-5D-5L, EQ-VAS