

## **Orthotopic Sigmoid Versus Ileal Neobladders in Japanese Patients: A Comparative Assessment of Complications, Functional Outcomes and Quality of Life**

**Introduction and Objective:** The orthotopic neobladder (NB) has become a common method for reconstruction of the urinary tract following removal of the bladder because of the generally favorable clinical outcomes of this procedure. At our institution as well, NB replacement have been performed as the primary procedure for urinary diversion. The objective of this study was to retrospectively review our experience with orthotopic NB created in 234 Japanese patients focusing on complications, voiding patterns and quality of life (QOL).

**Materials and Methods:** This study included 90 and 144 Japanese patients who underwent orthotopic ileal and sigmoid NB, respectively, after radical cystectomy, and postoperative clinical outcomes between the sigmoid and ileal NB groups (SNBG and INBG) were compared.

**Results:** In this series, 110 early and 51 late complications occurred in 71 and 41 patients, respectively; however, there was no significant difference in the incidence of complications between SNBG and INBG. At 1 year postoperatively, there were no significant differences in the proportion of spontaneous voiders and the continence status between these two groups; however, despite the lack of significant differences in the maximal flow rate and voided volume, the post-void residual in SNBG was significantly smaller than that in INBG. Voiding functional outcomes at 5 years postoperatively were also obtained from 28 and 49 in SNBG and INBG, respectively. Although there were no significant changes in the functional outcomes in SNBG, the proportion of spontaneous voiders and post-void residual in INBG at 5 years postoperatively were significantly poorer than those at 1 year postoperatively. Furthermore, the postoperative health-related quality of life assessed by a Short-Form 36 survey did not show any significant differences in 7 of the 8 scores between the 234 patients with NB and an age-matched control population, and there were no significant differences in all of the 8 scale scores between SNBG and INBG.

**Conclusions:** Orthotopic NB creation after radical cystectomy could generally provide acceptable clinical outcomes on long-term follow-up; however, the voiding function, particularly that on long-term follow-up, in SNBG appeared to be more favorable than that in INBG.