

Immediate Administration of PDE5i after Radical Prostatectomy Temporarily Increases the Need for Incontinence Pads but Improves Final Continence Status

Introduction and Objective: To prevent erectile dysfunction after radical prostatectomy (RP), penile rehabilitation using phosphodiesterase type-5 inhibitors (PDE5i) has recently attracted attention. We have implemented a program in which PDE5i is administered immediately after RP to prevent the corporeal smooth-muscle loss that starts soon after RP. In the present study, we evaluated the effects of immediate PDE5i therapy on the recovery of urinary continence (UC) after bilateral nerve-sparing RP (BNSRP) and compared the results with retrospective data from a previous study of non-immediate PDE5i therapy.

Materials and Methods: Starting in August 2008, the proportion of patients who did not use incontinence pad (pad-free patients) among 31 patients who were administered PDE5i twice a week starting the day after BNSRP for the first 4 weeks and once a week thereafter (immediate-PDE5i group) was determined. To estimate differences in the effects of PDE5i on UC according to the timing of initiation of PDE5i treatment, the proportion of pad-free patients among 103 different patients who underwent BNSRP between August 2002 and July 2008 was determined retrospectively. Among these patients, PDE5i had been prescribed if patients complained of erectile dysfunction and demanded pharmacotherapy. The 103 patients were classified into two groups: those taking PDE5i (PDE5i group) and those taking no medication (non-PDE5i group). Information on pad usage was obtained from self-administered questionnaires preoperatively and at 1, 3, 6, 12, 18, 24 and 36 months after BNSRP. The proportion of pad-free patients in the immediate-PDE5i group was compared with those in the PDE5i and non-PDE5i groups.

Results: In all groups, the proportions of pad-free patients initially decreased to the lowest value at 1 month after BNSRP and gradually improved thereafter. Deterioration of urinary incontinence immediately after BNSRP was worst in the immediate-PDE5i group. However, the proportion of pad-free patients in the immediate-PDE5i group showed better recovery than those in both the PDE5i and non-PDE5i groups, finally returning nearly to the preoperative level.

Conclusions: The present data indicate that PDE5i administration can improve UC after BNSRP. However, the possibility of temporary deterioration of UC when PDE5i is administered immediately after BNSRP must be kept in mind.