Effect of Intrafascial Dissection Nerve-Sparing Technique on Early Recovery from Urinary Incontinence after Laparoscopic Radical Prostatectomy

Introduction and Objectives: We performed intrafascial dissection nerve-sparing (ID) technique that, along with laparoscopic radical prostatectomy (LRP), can achieve early recovery from postoperative urinary incontinence (UI) and erectile dysfunction. In this study, urinary and sexual functions after LRP using the ID technique were evaluated.
Materials and Methods: In this study, 267 patients who underwent LRP were recruited. Patients were divided into three groups: the ID group (n=75); the conventional nerve-sparing (CN) group (n=51); the non-nerve-sparing (NN) group (n=141). Postoperative functions were evaluated using the Expanded Prostate Cancer Index Composite (EPIC) score. Oncological outcomes were evaluated based on positive surgical margin (PSM).
Results: Using the EPIC score, significant early recovery in urinary function and UI was observed in the ID group. Early recovery from UI was achieved by 37% in the ID group, 25% in the CN group, and 15% in the NN group at 1 month, and by 64% in the ID group, 45% in the CN group, and 44% in the NN group at 3 months. The continence rate in the early period was significantly better in the ID group than in the other groups. There was no difference in sexual function between the ID and CN groups. In pT2 patients, a PSM was found in 10% of the ID group, 13% of the CN group, and 9% of the NN group. The PSM rate was equivalent among three groups.
Conclusions: The ID sparing technique appears to be a useful method to achieve early recovery from urinary incontinence after LRP, without adversely affecting the oncological outcome.