

Impact of LUTS/BPH Treatment by Tamsulosin and Solifenacin Combination Therapy on Erectile Function

Introduction and Objectives: Some reports suggest that the improvement of LUTS leads to erectile dysfunction. The aim of this study was to examine the effects of a concomitant treatment of alpha-blocker (tamsulosin) and antimuscarinic agent (solifenacin) on erectile function in patients with LUTS/BPH.

Materials and Methods: Fifty-seven male patients with LUTS/BPH were assessed for the degree of LUTS and erectile function using the International Prostate Symptom Score (IPSS: total scores, storage symptoms (ST), voiding symptoms (VD), and quality of life (QoL)) and a 5-item version of the International Index of Erectile Function (IIEF-5). Then, prostate-specific antigen (PSA), trans-rectal ultrasonography (TRUS), urine flowmetry (UFM), and residual urine (RU) tests were conducted. In group 1 (tamsulosin) and group 2 (tamsulosin and solifenacin), changes in IPSS (total, ST, and VD), IIEF-5, UFM, and RU were measured following a 3-month treatment period. In both groups, it was determined whether treatment was associated with changes in LUTS and erectile function pre- and post-treatment and whether the improvement in IPSS was correlated with IIEF-5. Comparative analysis was also done to examine whether there is a relinear relationship between improved IPSS scores and IIEF-5 scores before and after treatment of the two groups

Results: A comparison of the degree of improvement in all the parameters before and after treatment indicated that both groups showed significant improvement in total IPSS, IPSS-ST, IPSS-VD, and QoL ($p < 0.05$). In group 1, as the IPSS-ST domain score improved, the IIEF-5 also significantly improved. However, in group 2, improvement of the IPSS-ST domain score showed no significant association with IIEF-5.

Conclusion: In patients with LUTS/BPH, tamsulosin and solifenacin combination therapy was effective in LUTS, but erectile function was not significantly improved. Therefore, although effective in improving LUTS, combination therapy using alpha-blocker and antimuscarinic agent was not effective in improving erectile function.