

The Efficacy of Daily Phosphodiesterase 5 Inhibitor for Men with Erectile Dysfunction after Radical Prostatectomy

Introduction and Objective: After radical prostatectomy, erectile dysfunction (ED) is common complication. But post prostatectomy ED tends to respond less positively to Phosphodiesterase 5 (PDE 5) inhibitor. We tried to treat post prostatectomy ED with daily (PDE 5) inhibitor in men with previously unresponsive to on-demand PDE5 inhibitor.

Materials and Methods: A total of 37 patients with post prostatectomy ED took on-demand various PDE5 inhibitor and 26 patients (70.2%) were non-responders. We divided these patient two groups. Group A (n=13) took daily Tadalafil 5mg and Group B (n=13) took daily udenafil 50mg at last 12 weeks. The outcome were measured change from baseline in the erectile function domain of the International Index of Erectile Function (IIEF-EF) and the proportion of "yes" responses to the Sexual Encounter Profile (SEP) questions 2 and 3 after 4, 8 and 12 weeks later. Global Assessment Question and additional questions about adverse effects were administered. Student *t*-test was used for statistical analysis.

Results: Patients receiving daily Tadalafil 5mg (group A) experienced an improvement of 7.8 in the IIEF-EF domain score from baseline compared with group B that improved only 6.7 point, but it has not statistical significance ($p>0.01$). Seven patients (53.8%) in group A succeeded penetration (SEP question 2) and group B was 38.5% ($p>0.01$). About SEP question 3, 6 of group A patients (46.2%) were answered successfully completed intercourse. In group B, 30.8% of patient answered 'Yes' ($p>0.01$). Six patients (46.2%) in group A answered daily Tadalafil 5mg improved their sexual function in Global Assessment Question at end point of study. Only one patient in group A response to daily Tadalafil after 4-week medication, but after 12 week, 6 patients successfully completed intercourse. And daily Tadalafil and udenafil was well tolerated with headache, dyspepsia, and facial flushing as the well known adverse effects.

Conclusions: Daily PDE5 inhibitor was effective and well tolerated in patient with post prostatectomy erectile dysfunction previously failed to on-demand PDE5 inhibitor. Long acting drug and long term use of PDE5 inhibitors may be more effective.