## Efficacy of Vardenafil Treatment and Couple Therapy in Diabetic Patients with Erectile Dysfunction

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**Introduction.** Erectile dysfunction (ED) is one of the most common complications of type 2 diabetes mellitus (2 DM) in patients with low grade of couple`s sexual life. Recent investigations indicated that pharmacologic treatment with phosphodiesterase type 5 (PDE-5) inhibitors improves erectile dysfunction symptoms by potentiating the effect of nitric oxide in the penis. Non-pharmacologic intervention by couple therapy improves communication and overcomes role conflicts and relationship problems.

**The aim.** The purpose of the study was to investigate the benefits of the PDE-5 inhibitor Vardenafil and couple therapy in the integrated five-week treatment course for employed diabetic male patients with ED.

Materials and methods. The random sample included 31 employed heterosexual and homosexual males aged 38–61 years with at least six months or newly diagnosed 2 DM, suffering from ED over the past six months. All patients were asked to complete a questionnaire investigating their ability to achieve and maintain erection. Erectile dysfunction was defined as a failure to achieve and maintain erection sufficient for satisfactory sexual performance. 19 males (group A) received five-week integrated treatment: oral medication Vardenafil 10 mg per day taken 1 h before intended intercourse, and couple therapy (CT) – 60 minutes once a week. 12 males (group B) received five weeks only monotherapy – Vardenafil 10 mg once a day 1 h before intended intercourse. Sexual function before and after treatment course and during follow-up was evaluated with the International Index of Erectile Function, a 5-item version (IIEF-5) Questionnaire, self-report instrument with scores: 8–11 (moderate ED), 12–16 (mild to moderate ED), 17–21 (mild ED), 22–25 (a normal degree of erectile functioning). Intensity of couple's well-being was measured by patient's own Visual Analogue Scale (5-point scale: 0 – no complaints, 5 – bad well-being). Treatment efficacy was re-evaluated in a scheduled follow-up visit after two months.

**Results.** After five-week treatment course IIEF dimensions improved in 15 males – (78.9%) of group A patients and in 7 males (58.3%) of group B patients (20.2; p < 0.05). Improvement was significant in patients who received pharmacologic treatment with PDE-5 inhibitor integrated with non-pharmacologic treatment – couple therapy. During follow-up was stated that adequate treatment of 2 DM and ED in employed diabetic males, mastering positive self-influence and communication skills during couple therapy are correlated to relation and lifestyle factors such as stopping smoking and alcohol consumption, maintaining a healthy body weight. 12 group A males (63.1%) in follow-up used only 10 mg of Vardenafil in a 72-hour (3 days) period. There were no serious adverse events related to Vardenafil.

**Conclusions.** The once-a-day therapy with 10 mg Vardenafil and weekly couple therapy in the integrated five-week treatment course for employed diabetic patients with ED significantly improved quality of life in sexually active males. Erectile dysfunction as health state marker is an important issue for diabetic male of any age in opposite or same-sex couple.

