

<http://dx.doi.org/10.52113/1/2410-4590/2021-31-34>

Comparative study between usage of medicine containing a mixture of Dapoxetine and Tadalafil with the usage of these drugs separately in treatment of rapid ejaculation

Anis Hasan Haleem Abu-Salih ¹

Abstract

A study was conducted on 58 patients aged from 18-63 years old, they suffering from rapid ejaculation and all their Intravaginal ejaculation latency time (IELT) were less than 2 minutes. This study done at Erectile dysfunction unit in Al-Muthana teaching hospital for a period of 1 month (March/2019). The patients were divided into 2 groups: Group 1: Patient received 30 mg of Dapoxetine 1hr before coitus and 10 mg of Tadalafil 30 min before coitus. Group 2: Patient received Dapoxetine 20 mg + Tadalafil 10 mg mixed in one tablet 1 hr before coitus. The result of our study revealed that the IELT before treatment was less than 2 minutes in both groups, after treatment the IELT increased significantly ($P \leq 0.05$) in group 1 and group 2 (337.9 ± 3.72 and 222.4 ± 2.88 seconds) respectively. The IELT in group 1 was increased significantly ($P \leq 0.05$) compared to IELT in group 2 after treatment. In conclusion, the administration of Dapoxetine before 1 hr. of coitus and Tadalafil 30 min. before coitus (G1) gave a good result in increasing of IELT as compared to mixture of these drugs in one tablet.

Keywords: IELT, Dapoxetine, Tadalafil

*Corresponding Author: Alsahianeess@gmail.com

¹ Al-Hussein Teaching Hospital, Samawah, Al-Muthanna

Received January 23, 2021; revised April 18, 2021; accepted May 22, 2021; published May 29, 2021

©This is article distributed under the terms of the Creative Commons Attribution License

<http://creativecommons.org/licenses/by/4.0>, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Introduction

A study was conducted on 58 patients aged from 18-63 years old, they suffering from rapid ejaculation and all their Intravaginal ejaculation latency time (IELT) were less than 2 minutes. This study done at Erectile dysfunction unit in Al-Muthana teaching hospital for a period of 1 month (March/ 2019). The patients were divided into 2 groups: Group 1: Patient received 30 mg of Dapoxetine 1hr before coitus and 10 mg of Tadalafil 30 min before coitus. Group 2: Patient received Dapoxetine 20 mg + Tadalafil 10 mg mixed in one tablet 1 hr before coitus. The result of our study revealed that the IELT before treatment was less than 2 minutes in both groups, after treatment the IELT increased significantly ($P \leq 0.05$) in group 1 and group 2 (337.9 ± 3.72 and 222.4 ± 2.88 seconds) respectively.

The IELT in group 1 was increased significantly ($P \leq 0.05$) compared to IELT in group 2 after treatment. In conclusion, the administration of Dapoxetine before 1 hr. of coitus and Tadalafil 30 min. before coitus (G1) gave a good result in increasing of IELT as compared to mixture of these drugs in one tablet.

In 1994, Waldinger et al. introduced the intravaginal ejaculation latency time (IELT) as a measure for the ejaculation time of heterosexual intercourse (Waldinger et al., 1994). The IELT is defined as the time from the moment of vaginal penetration until the moment of intravaginal ejaculation (Waldinger et al., 1994). In case of ejaculation outside the vagina the IELT is zero by definition. The most accurate

way to measure the IELT is the use of a stopwatch handled by the female partner. In a stopwatch study in a cohort of Dutch men with lifelong premature ejaculation, it was shown that the IELT had a skewed distribution and that 85% of men ejaculated within 1 minute after penetration (Waldinger et al., 1998). In addition, in a meta-analysis of all drug treatment studies of premature ejaculation from 1943 to 2003, it was shown that prospective real-time stopwatch measurement of the IELT during selective serotonin reuptake inhibitors (SSRI) treatment led to a smaller, and therefore more valid, confidence interval of the IELT compared to retrospective questionnaire studies of the IELT (Waldinger et al., 2004). In 2005, a prospective stopwatch study of 491 men of the general male population in 5 countries (The Netherlands, United Kingdom, Spain, Turkey, and the United States) also showed a skewed distribution to the right with a median IELT of 5.4 minutes (range, 0.55–44.1 minutes) (Waldinger et al., 2005). Using a blinded timer device, a second study was performed in 2009 in a new group of 474 men of the general population in the same countries (Waldinger et al., 2009).

Material and methods

The study was conducted at Erectile dysfunction unit in Al-Muthana teaching hospital for a period of 1 month (March/ 2019). 58 patient aged from 18-63 years old were used for this study to treatment of rapid ejaculation by calculation of Intravaginal ejaculation latency time (IELT), all patient had IELT less than 2 minutes. The patients were divided into 2 groups:

Group 1: Patient received 30 mg of Dapoxetine 1hr before coitus and 10 mg of Tadalafil 30 min before coitus.

Group 2: Patient received Dapoxetine 20 mg + Tadalafil 10 mg mixed in one tablet 1 hr before coitus. The onset of action of Dapoxetine is 1-3 hours while the onset of Tadalafil is half hour (Dresser et al., 2006), both groups took these drugs on demand before coitus every 3 days on empty stomach for a duration of 1 month which was the duration of this study.

Statistical Analysis

The software Statistical Analysis Method- SAS (2012) was used to detect the effect of difference factors in parameters of the study. Least significant difference –LSD test (Analysis of Variation-ANOVA) was used to significant compare among means.

Result and discussion

The result of our study revealed that the IELT before treatment was less than 2 minutes in both groups, after treatment the IELT increased significantly ($P \leq 0.05$) in group 1 and group 2 (337.9 ± 3.72 and 222.4 ± 2.88 seconds) respectively. The IELT in group 1 was increased significantly ($P \leq 0.05$) compared to IELT in group 2 after treatment (Table 1).

The results of our study were agreed with Hosseini and Yarmohammadi (2007); Wang et al. (2007) and Tuken et al. (2019) whom found that the administration of Dapoxetine in combination with Tadalafil were increased IELT. While our result was disagreed with Dresser et al. (2006) revealed that dapoxetine and PDE5 inhibitors (tadalafil or sildenafil) have no clinically important interactions with each other.

The findings of a recent study confirmed that PDE5 inhibitors (sildenafil, tadalafil, or mirodenafil) plus SSRIs (paroxetine, fluoxetine, or dapoxetine) are superior to SSRIs alone in delaying the IELT and increasing the coitus episodes (Men et al., 2016).

Table 1.

The effect of Dapoxetine and Tadalafil on the Intravaginal ejaculation latency time (IELT).

| Groups | No. of patient | Intravaginal ejaculation latency time before treatment (mean±SE)\sec | Intravaginal ejaculation latency time after treatment (mean±SE)\sec |
|---|----------------|--|---|
| G1 (Patient received 30 mg of Dapoxetine 1hr before coitus and 10 mg of Tadalafil 30 min before coitus) | 30 | 119.8 ± 1.01 ^(b) | 337.9 ± 3.72 ^(Aa) |
| G2 (Patient received Dapoxetine 20 mg + Tadalafil 10 mg mixed in one tablet 1 hr before coitus) | 28 | 107.9 ± 1.15 ^(b) | 222.4 ± 2.88 ^(Ba) |

Within column different capital letter mean significant ($P \leq 0.05$).

Within rows different small letter mean significant ($P \leq 0.05$).

References

1. Waldinger MD, Hengeveld MW, Zwinderman AH. Paroxetine treatment of premature ejaculation: a double-blind, randomized, placebo-controlled study. *American Journal of Psychiatry* 1994;151(9):1377-1379.
2. Waldinger MD, Hengeveld MW, Zwinderman AH, Olivier B. An empirical operationalization study of DSM-IV diagnostic criteria for premature ejaculation. *International Journal of Psychiatry in Clinical Practice* 1998;2(4):287-293.
3. Waldinger MD, Zwinderman AH, Schweitzer DH, Olivier B. Relevance of methodological design for the interpretation of efficacy of drug treatment of premature ejaculation: a systematic review and meta-analysis. *International journal of impotence research* 2004;16(4):369-381.
4. Waldinger MD, Quinn P, Dilleen M, et al. Ejaculation disorders: A multinational population survey of intravaginal ejaculation latency time. *The journal of sexual medicine* 2005;2(4):492-497.
5. Waldinger MD, McIntosh J, Schweitzer DH. A five-nation survey to assess the distribution of the intravaginal ejaculatory latency time among the general male population. *The journal of sexual medicine* 2009;6(10):2888-2895.
6. Hosseini MM, Yarmohammadi H. Effect of fluoxetine alone and in combination with sildenafil in patients with premature ejaculation. *Urologia internationalis* 2008;79(1):28-32.
7. Wang W F, Wang Y, Minhas S, Ralph DJ. Can sildenafil treat primary premature ejaculation? A prospective clinical study. *International journal of urology* 2007;14(4):331-335.
8. Tuken M, Culha MG, Serefoglu EC. Efficacy and safety of dapoxetine/sildenafil combination tablets in the treatment of men with premature ejaculation and concomitant erectile dysfunction—DAP-SPEED Study. *International journal of impotence research* 2009;31(2):92-96.
9. Dresser MJ, Desai D, Gidwani S, Seftel AD, Modi NB. Dapoxetine, a novel treatment for premature ejaculation, does not have pharmacokinetic interactions with phosphodiesterase-5 inhibitors. *International journal of impotence research* 2006;18(1):104-110.

10. Men C, Yu L, Yuan H, Cui Y. Efficacy and safety of phosphodiesterase type 5 inhibitors on primary premature ejaculation in men receiving selective serotonin reuptake inhibitors therapy: a systematic review and meta-analysis. *Andrologia* 2016;48(9):1066-1073.
11. SAS J. Statistical Analysis System, v. 10.0. 2. Cary, North Carolina. USA. 2016.