A Comparison between Citalopram and Escitalopram in treatment of patients with premature ejaculation: A double-Blind Controlled Clinical Study

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Abstract:

Objective: to compare of efficacy of citalopram and escitalopram in treatment of patients with premature ejaculation (PE).

Design: A randomized, double-blind -controlled study.

Methods: Patients with PE (n=60) were randomly divided into two treatment groups: a group receiving escitalopram 10 mg daily for 6 weeks (n=30); and a group receiving citalopram 20 mg daily for 6 weeks (n=30). The Chinese Index of Sexual Function for PE was used for patient evaluation at pre-treatment, at 2 weeks intervals after start of treatment for 6 weeks, and at 3 months after stopping treatment.

Results: The mean of total scores in the escitalopram group at initial pre-treatment evaluation and at 2, 4 and 6 weeks of treatment and at 3 months after stop of treatment (21.66 ± 1.80, 29.63 ± 1.47, 36.83 ±1.64, 43.76 ± 1.27 and 41.40 ± 1.07; respectively) were not significantly different from those in the citalopram group (21.86 ± 1.22, 29.30 ± 0.91, 37.13 ± 0.50, 43.90 ± 0.54 and 41.70 ± 0.59; respectively) (P value = 0.51, 0.27, 0.27, 0.32 and 0.10 respectively).

Conclusion: Daily administrations of 10 mg of escitalopram or 20 mg citalopram for 6 weeks were found to be equally effective for treatment of patients with PE. Both drugs have the potential to provide long term control over ejaculation.

Key words: Premature ejaculation, SSRIs, escitalopram, citalopram

Introduction:

Premature ejaculation (PE) is the most frequently encountered sexual complaint of men [(1).] It is most common in adolescents and young adult males. Risk of PE is increased in men who lack sexual experience, and/or knowledge regarding normal male and female sexual responses; and in individuals who associate psychological factors (such as fear, guilt, and anxiety) with sexual activity [(2).] The current definition of PE is persistent or recurrent occurrence of ejaculation with minimal sexual stimulation before, on, or shortly after vaginal penetration, and before the man wishes it. Such sexual dysfunction is an important source of distress to the man and his partner [(3).]

Etiology of PE can be divided into psycho-sexual (anxiety-related, behavioral) and biological (pelvic floor alteration, hypersensitivity of glans penis, accelerated conduction and

cortical amplification of genital stimuli). Both etiologies share the neurobiological assumption of serotonergic mediation. Premature ejaculation may be secondary to urological diseases (prostatovesiculitis) or to neurological diseases (multiple sclerosis and peripheral neuropathies) [4].

Currently, no therapy is approved by the FDA for treatment of PE [5, 6]. Treatment modalities as recommended by the British Association of Sexual Health and HIV include behavioral therapy, tricyclic antidepressants, selective serotonin reuptake inhibitors (SSRIs), local anaesthetic creams and PDE5 inhibitors [7]. Numerous studies have shown that SSRIs and drugs with SSRI-like side effects are safe and effective in treatment of PE [8, 9]. The SSRI antidepressants were proved to be effective in treatment of patients with PE whether or not they suffer from depression [10].

Citalopram is a potent specific inhibitor of neuronal serotonin reuptake with few side effects (11). Administration of 20 mg citalopram daily for 12 weeks in patient with PE had significantly increased intravaginal ejaculation latency time (IELT) and intercourse satisfaction for both partners (12). Escitalopram oxalate, the S-enantiomer of citalopram, has been introduced for treatment of depression and anxiety disorders (13). Many studies have shown that escitalopram was effective in treatment of patients with PE (14, 15).

The objective of this study was to compare efficacy of citalopram and escitalopram in treatment of patients with PE.

Patients and methods:

The study included patients attending the out patient clinic of Andrology at Sohag Faculty of Medicine between October 2009 and April 2011 with history of PE of more than 1 year. Patients were considered to have PE if he reported persistent or recurrent occurrence of ejaculation with minimal sexual stimulation before, on, or shortly after vaginal penetration, and before the patient wishes it and when such disturbance was a source of distress to the man and his partner [3]. The study was approved by the Research and Ethical Committees at Sohag Faculty of Medicine. An informed consent was signed by all participants after procedures and possible side effects were explained to them.

Patients were subjected to preliminary assessment including a detailed medical and sexual history, general and genital examination. Patients with history suggestive of one of the following conditions were excluded: 1) erectile dysfunction, 2) diabetes mellitus (DM) 3) chronic renal failure, 4) chronic prostatitis, 5) neurological diseases and 6) C.N.S. medications. Patients who received medications for PE over the last 6 months prior to enrolment in the study were also excluded.

Patients who fulfilled the criteria for inclusion in the study (n=60) were randomly divided after coding into two treatment groups: a group received escitalopram 10 mg daily for 6 weeks (n=30); and a group received citalopram 20 mg daily for 6 weeks (n=30). Tablets (escitalopram and citalopram) were identical in shape, color and packing. Both patients and investigators were blinded as the given medications

Patients were evaluated before start of treatment and at 2 weeks intervals after drug administration for 6 weeks and at 3 months after stopping treatment using questionnaire of Chinese Index of Sexual Function for PE (Table 1). Disclosure of the coded

medications was done after completing the course of treatment for all patients.

The Chinese Index of PE is the most useful questionnaire for evaluation patients with PE before and after treatment due to the following reasons: 1) it is a simple questionnaire can be easily fulfilled, 2) it is the only questionnaire fulfilling all domains of sexual function, IELT and patient reported outcome (PRO) measures, 3) it is the only questionnaire evaluating IELT in details that extend from score 1 (<30 sec) to score 10 (30-45 minute) which can help in the evaluation of the efficacy of drugs used for treatment of PE, 4) in addition, most of IELT scores presented in ranges of time which facilities to assess the IELT without use of stopwatch.

Statistical analysis:

Results were recorded as mean± standard deviation (SD). Soft were (SPSS) was used for analysis. An average score was calculated for each question, and for all questions. P value < 0.05 was considered significant.

Results:

In this study, 60 patients met the criteria for inclusion and 15 patients were excluded (7 patients refused to participate in the study, 5 patients with DM on oral hypoglycemic therapy, 2 patients with history suggestive of chronic prostatits, 1 patient with history of epilepsy on CNS medications).

The age of patients who participated in the study ranged from 25 to 58 years (35.9 ± 7.7). The duration of marriage of all patients ranged from 1.5 to 25 years (8.0 ± 6.2). The duration of PE of all patients ranged from 1.5 to 15 years (6.4 ± 4.3). The frequency of intercourse per week of all patients ranged from 1 to 4 acts per week (2.50 ± 0.70).

No statistically significant difference was found on comparing basal conditions (age of the patients, duration of marriage, duration of PE and frequency of intercourse) between citalopram and escitalopram groups (P value > 0.05).

In the escitalopram group, the difference in the mean scores of questions No. 1, 2 and 3 at initial pre-treatment evaluation and at 2 weeks, 4 weeks, 6 weeks of treatment and at 3 months after stop of treatment were not significant (Table 2).

The mean score of question 4 (IELT) in escitalopram group was significantly higher at 2 weeks, 4 weeks, 6 weeks of treatment and 3 months after stop of treatment as compared to initial pre-treatment evaluation (2.70 ± 0.70) (5.66 ± 0.92, 7.10 ± 0.70, 8.00 ± 0.00 and 5.73 ± 0.44; respectively, P value = 0.0001, 0.0001, 0.0001 and 0.0001; respectively) (Table 2).

The mean scores of questions 5, 6, 7, 8, 9 and 10 at 2 weeks, 4 weeks, 6 weeks of treatment and at 3 months after stop of treatment were significantly higher in escitalopram group as compared to initial pre-treatment evaluation (P value = 0.0001) (Table 2).

In the escitalopram group, the mean (±SD) of the total scores at 2 weeks, 4 weeks, 6 weeks of treatment and at 3 months after stop of treatment (29.63 ± 1.47, 36.83 ± 1.64, 43.76 ± 1.27 and 41.40 ± 1.07; respectively) were significantly higher than initial pre-treatment score (21.66±1.80) (P value = 0.0001, 0.0001, 0.0001 and 0.0001; respectively) (Table 2).

In the citalopram group, the difference in the mean scores of question 1, 2, and 3 between initial pre-treatment evaluations and 2 weeks, 4 weeks, 6 weeks of treatment and 3 months after stop treatment were not significant (Table 3).

The mean score of question 4 (IELT) in citalopram group was significantly higher at 2 weeks, 4 weeks, 6 weeks of treatment and 3 months after stop of treatment as compared to initial pre-treatment evaluation (2.86 ± 0.30) (5.46 ± 0.81, 7.16 ± 0.46,

7.96 ± 0.18 and 5.83 ± 0.36; respectively, P value = 0.0001, 0.0001, 0.0001 and 0.0001; respectively) (Table 3).

The mean scores of questions 5, 6, 7, 8, 9 and 10 at 2 weeks, 4 weeks, 6 weeks of treatment and 3 months after stop of treatment were significantly higher in citalopram group as compared to initial pre-treatment evaluations (P value = 0.0001) (Table 3).

In the citalopram group, the mean (±SD) of the total scores at 2 weeks, 4 weeks, 6 weeks of treatment and 3 months after stop of treatment (29.30 ± 0.91, 37.13 ± 0.50, 43.90 ± 0.54 and 41.70 ± 0.59; respectively) were significantly higher than initial pre-treatment score (21.86 ± 1.22) (P value = 0.0001, 0.0001, 0.0001 and 0.0001 respectively) (Table 3).

The difference in the mean scores of question 1 to 3 and 5 to 10 between escitalopram versus citalopram groups were not significant at initial pre-treatment evaluations and at 2 weeks, 4 weeks, 6 weeks of treatment and at 3 months after stop treatment (P value > 0.05).

The mean score of question 4 (IELT) was not significantly different in escitalopram versus citalopram groups at initial evaluation and at 2 weeks, 4 weeks, 6 weeks of treatment and at 3 months after stop of treatment (2.70 ± 0.70, 5.66 ± 0.92, 7.10 ± 0.71, 8.00 ± 0.00 and 5.73 ± 0.44, respectively versus 2.86 ± 0.30, 5.46 ± 0.81, 7.16 ± 0.46, 7.96 ± 0.18 and 5.83 ± 0.36, respectively) (P value =0.23, 0.32, 0.64, 0.32, and 0.13; respectively).

Total scores (mean ± SD) in the escitalopram group at initial pre-treatment evaluation and at 2, 4 and 6 weeks of treatment and at 3 months after stop of treatment (21.66 ± 1.80, 29.63 ± 1.47, 36.83 ±1.64, 43.76 ± 1.27 and 41.40 ± 1.07; respectively) were not significantly different from those in the citalopram group (21.86 ± 1.22, 29.30 ± 0.91, 37.13 ± 0.50, 43.90 ± 0.54 and 41.70 ± 0.59; respectively) (P value = 0.51, 0.27, 0.27, 0.32 and 0.10 respectively) (Table 4).

Table 1. Chinese Index of Sexual Function for PE [30].

Q1.What about your sexual desire? 1. Very low 2. Low 3. Average 4. High 5. Very high	**Q6. What about your sexual satisfaction?** 1. Very dissatisfied 2. Always dissatisfied 3. Generally satisfied 4. Often satisfied 5. Always satisfied
Q2. Do you have an erection hard enough for sexual intercourse? 1. Almost never 2. Seldom 3. Half of time 4. Often 5. Always	**Q7. What about your partner's sexual satisfaction?** 1. Very dissatisfied 2. Always dissatisfied 3. Generally satisfied 4. Often satisfied 5. Always satisfied
Q3. Can you maintain erection to complete sexual intercourse? 1. Almost never 2. Seldom 3. Half of time 4. Often 5. Always	**Q8. Does your partner reach orgasm in sexual intercourse?** 1. Almost never 2. Seldom 3. Half of time 4. Often 5. Always
Q4. How long from intromission to ejaculation (IELT)? 1. Too short (<30 sec) 6. >4-5 min (min) 2. Very short (<1 min) 7. 6-10 (min) 3. Short (<2 min) 8. 11-20 (min) 4. Often short (<3 min) 9. 21-30 (min) 5. Not short (>3 min) 10. 30-45 (min)	**Q9. What about your confidence in completing sexual activity?** 1. Very low 2. Low 3. Average 4. High 5. Very high
Q5. Can you prolong the intercourse time? 1. Never 2. Very difficult 3. Difficult 4. Possible 5. Easy	**Q10. Do you feel anxiety, or stress during sexual activity?** 1. Always 2. Often 3. Half of time 4. Seldom 5. Almost never

Table 2. Comparison of mean (±SD) scores of the 10- item questionnaire of Chinese Index of PE [33] at initial pre-treatment evaluation and at 2 weeks intervals up to 6 weeks and at 3 months after stop of treatment in escitalopram group.

Question	Q1 What about your sexual desire?	Q2 Do you have an erection hard enough for sexual intercourse?	Q3 Can you maintain erection to complete sexual intercourse?	Q4 How long from intromission to ejaculation (IELT)?	Q5 Can you prolong the intercourse time?	Q6 What about your sexual satisfaction?	Q7 What about your partner's sexual satisfaction	Q8 Does your partner reach orgasm in sexual intercourse?	Q9 What about your confidence in completing sexual activity?	Q10 Do you feel anxiety, or stress during sexual activity?	Total scores
Pre-treatment	3.90±0.30	3.86±0.34	3.86±0.34	2.70±0.70	1.06±0.25	1.06±0.25	1.06±0.25	1.06±0.25	1.53±0.50	1.53±0.50	21.66±1.80
2 weeks	3.93±0.25	3.90±0.30	3.96±0.18	5.66±0.92	2.03±0.18	2.03±0.18	2.03±0.18	2.03±0.18	2.03±0.00	1.96±0.18	29.63±1.74
4 weeks	4.00±0.00	3.96±0.18	3.96±0.18	7.10±0.71	2.96±0.18	2.96±0.18	2.96±0.18	2.96±0.18	3.03±0.00	2.96±0.18	36.83±1.64
6 weeks	4.00±0.00	3.96±0.18	3.96±0.18	8.00±0.00	3.96±0.18	3.96±0.18	3.96±0.18	3.96±0.18	4.00±0.00	3.96±0.18	43.76±1.27
3 months after stop treatment	4.00±0.00	3.96±0.18	3.90±0.30	5.73±0.44	3.96±0.18	3.96±0.18	3.96±0.18	3.96±0.18	3.96±0.18	3.96±0.18	41.40±1.07
P_1	**0.57**	**0.32**	**0.08**	**0.0001**	**0.0001**	**0.0001**	**0.0001**	**0.0001**	**0.0001**	**0.0001**	**0.0001**
P_2	**0.08**	**0.08**	**0.08**	**0.0001**	**0.0001**	**0.0001**	**0.0001**	**0.0001**	**0.0001**	**0.0001**	**0.0001**
P_3	**0.08**	**0.08**	**0.08**	**0.0001**	**0.0001**	**0.0001**	**0.0001**	**0.0001**	**0.0001**	**0.0001**	**0.0001**
P_4	**0.08**	**0.08**	**0.57**	**0.0001**	**0.0001**	**0.0001**	**0.0001**	**0.0001**	**0.0001**	**0.0001**	**0.0001**

SD: standard deviation. **IELT:** intravaginal ejaculation latency time**. PE:** premature ejaculation. **P_1** = comparison of scores of initial pre-treatment evaluations with 2 weeks of treatment. **P_2** = comparison

scores of initial pre-treatment evaluations with 4 weeks of treatment. **P_{3} =** comparison scores of initial pre-treatment evaluations with 6 weeks of treatment. **P_{4} =** comparison of scores of initial pre-treatment evaluations with 3 months after stop of treatment. **P value** < 0.05 was significant.

Table 3. Comparison of mean (±SD) scores of the 10- item questionnaire of Chinese Index of PE [33] at initial pre-treatment evaluations and at 2 weeks intervals up to 6 weeks and at 3 months after stop of treatment in citalopram group.

Question	Q1 What about your sexual desire?	Q2 Do you have an erection hard enough for sexual intercourse?	Q3 Can you maintain erection to complete sexual intercourse?	Q4 How long from intromission to ejaculation (IELT)?	Q5 Can you prolong the intercourse time?	Q6 What about your sexual satisfacti on?	Q7 What about your partner's sexual satisfaction?	Q8 Does your partner reach orgasm in sexual intercourse?	Q9 What about your confidence in completing sexual activity?	Q10 Do you feel anxiety, or stress during sexual activity?	Total scores
Pre-treatment	3.90±0.30	3.96±0.18	3.90±0.30	2.86±0.30	1.03±0.18	1.03±0.18	1.03±0.18	1.03±0.18	1.56±0.50	1.56±0.50	21.86±1.22
2 weeks	3.86±0.34	3.96±0.18	3.96±0.18	5.46±0.81	2.00±0.00	2.00±0.00	2.00±0.00	2.00±0.00	2.00±0.00	2.00±0.00	29.30±0.91
4 weeks	3.96±0.18	4.00±0.00	4.00±0.00	7.16±0.46	3.00±0.00	3.00±0.00	3.00±0.00	3.00±0.00	3.00±0.00	3.00±0.00	37.13±0.50
6 weeks	3.96±0.18	4.00±0.00	4.00±0.00	7.96±0.18	4.00±0.00	4.00±0.00	4.00±0.00	4.00±0.00	3.96±0.18	4.00±0.00	43.90±0.54
3 months after stop treatment	3.96±0.18	3.93±0.25	3.96±0.18	5.83±0.36	4.00±0.00	4.00±0.00	4.00±0.00	4.00±0.00	4.00±0.00	4.00±0.00	41.70±0.59
P_{1}	**0.66**	**1.00**	**0.16**	**0.0001**	**0.0001**	**0.0001**	**0.0001**	**0.0001**	**0.0001**	**0.0001**	**0.0001**
P_{2}	**0.16**	**0.32**	**0.08**	**0.0001**	**0.0001**	**0.0001**	**0.0001**	**0.0001**	**0.0001**	**0.0001**	**0.0001**
P_{3}	**0.16**	**0.32**	**0.08**	**0.0001**	**0.0001**	**0.0001**	**0.0001**	**0.0001**	**0.0001**	**0.0001**	**0.0001**
P_{4}	**0.16**	**0.32**	**0.16**	**0.0001**	**0.0001**	**0.0001**	**0.0001**	**0.0001**	**0.0001**	**0.0001**	**0.0001**

SD: standard deviation. **IELT:** intravaginal ejaculation latency time**. PE:** premature ejaculation. **P_1 =** comparison of scores of initial pre-treatment evaluations with 2 weeks of treatment. **P_2 =** comparison scores of initial pre-treatment evaluations with 4 weeks of treatment. **P_3 =** comparison scores of initial pre-treatment evaluations with 6 weeks of treatment. **P_4 =** comparison of scores of initial pre-treatment evaluations with 3 months after stop of treatment. **P value** < 0.05 was significant.

Table 4. Comparison of mean (±SD) total scores of Chinese Index of PE [33] at initial pre-treatment evaluations and at 2 weeks intervals up to 6 weeks and 3 months after stop treatment in escitalopram vs. citalopram groups.

Question	Treatment group	Pre-treatment	2 weeks	4 weeks	6 weeks	3 months after stop treatment
Total scores	Escitalopram	21.66±1.80	29.63±1.47	36.83±1.64	43.76±1.27	41.30±1.07
	Citalopram	21.86±1.22	29.30±0.91	37.13±0.50	43.90±0.54	41.70±0.59
	P value	**0.51**	**0.27**	**0.27**	**0.32**	**0.10**

P value < 0.05 was significant. **SD**: standard deviation.

Discussion:

The ability of SSRIs to delay ejaculation was first coincidentally discovered as a result of use of these drugs in the treatment of depression in men in the 1970s [16]. The SSRI antidepressants have emerged as effective treatment options for patients with PE whether or not they suffer from depression [10].

It has been found that daily administration of sertraline 50 mg for 4 weeks in patients with PE resulted in a significant increase in ILET and sexual satisfaction (17). It has been showed that daily administration of 20 mg paroxetine for 12 weeks in patients with PE resulted in significant increase in of IELT and intercourse satisfaction (18). Administration of 30-60 mg dapoxetine, 1-3 hours before anticipated sexual activity was effective in men with moderate-to-severe PE (19, 20, 21). A study on citalopram found that daily administration of 20 mg citalopram for 8 weeks in patient with PE resulted in significant increase in IELT and overall sexual satisfaction and decrease of performance anxiety (22).

In a previous study, our group had compared the efficacy of escitalopram versus placebo in treatment of patients with PE [23]. We found that daily administration of 10 mg escitalopram for 4 weeks in patients with PE resulted in significant increase in IELT and overall sexual satisfaction.

Many studies were done to compare the efficacy of escitalopram versus citalopram for the treatment of major depressive disorder [24, 25, 26]. However, no previous data are available on the comparison of efficacy of escitalopram versus citalopram in treatment of patients with PE.

In this study, daily intake of 10 mg escitalopram in patients with PE resulted in a significant increase of IELT that was evident after 2 weeks of administration. A similar increase of IELT was found in a group of patients with PE treated with daily doses of 20 mg of citalopram after 2 weeks of administration. The difference in increased IELT between the two groups was insignificant. A further increase of IELT was observed in both escitalopram and citalopram groups when treatment was continued for 6 weeks.

In addition, patients with PE treated with escitalopram or citalopram for 6 weeks were able to maintain the acquired increase in IELT up to 3 months after stopping treatment. Such finding indicates a potential positive role of escitalopram and citalopram not only in prolonging the time of ejaculation but also in providing a maintained therapeutic effect. However, longer periods of follow up are needed before a conclusion can be made as to the long term effectiveness of the drugs.

Our results also indicated that other domains of sexual functions such as desire and erection were not affected in patients treated with escitalopram or citalopram. The control over ejaculation, overall patient's, sexual satisfaction and anxiety status were significantly improved in the 2 treatment groups. Similarly, partner's sexual satisfaction and emotional condition were remarkably improved following husband treatment with escitalopram or citalopram.

Our results are consistent with those obtained by Safarinejad who showed that daily administration of 10 mg escitalopram for 12 weeks in patients with PE resulted in significant increase in IELT and intercourse satisfaction. The acquired increase in IELT was maintained up to 3 months after stopping treatment [(14).] Arafa and Shamloul found that daily administration escitalopram 10 mg in the early morning for 4 weeks resulted in a significant increase in ejaculation latency and sexual satisfaction in patients with PE [(15).]

It has been found that daily administration of 20 mg citalopram for 12 weeks in patient with PE resulted in significant increase in IELT and overall sexual satisfaction. The acquired increase in IELT was maintained up to 6 months after stopping treatment [(12).] It has been showed that daily administration of 20 mg citalopram for 8 weeks in patients with PE resulted in a significant increase in ejaculation latency and sexual satisfaction [(27).] It has been found that daily administration of 20 mg citalopram for 4 weeks in newly married men with PE resulted in significant increase in IELT and intercourse satisfaction after failed treatment with fluoxetine [(28).] However, Waldinger et al reported that citalopram exhibited only mild ejaculatory delay in patients with PE [(29).]

Future studies are warranted to test the effectiveness of escitalopram and citalopram in treatment of PE at doses other than 10 mg and 20 mg; respectively, and to compare results of daily intake with those of on demand. Other studies are also required to compare results of escitalopram and citalopram with other SSRIs e.g., fluoxetine, paroxetine ….etc, in treatment of PE.

In conclusion, daily administrations of 10 mg of escitalopram or 20 mg citalopram for 6 weeks were found to be equally effective for treatment of patients with PE. Both drugs have the potential to provide long term control over ejaculation

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الإيجاز العربى

مقارنة بين عقار السيتالوبرام و الا سيتالوبرام في علاج مرضى القذف المبكر: دراسة اكلينيكية عشوائية مزدوجة

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مقدمة والهدف من البحث:
يعتبر القذف المبكر من أكثر المشاكل الجنسية انتشاراً ويؤثر سلبياً على كل من الزوجين، وتعتبر العقاقير المثبطة لاعادة التقاط مادة السيروتونين من أكثر الأدوية استعمالاً في علاج هؤلاء المرضى. والهدف من هذا البحث هو مقارنة بين فاعلية عقار السيتالوبرام و الاسيتالوبرام في علاج مرضى القذف المبكر.

المرضى وطرق البحث:
قد تم اختيار المرضى من المترددين على عيادة أمراض الذكورة بمستشفى سوهاج الجامعي وعددهم٦٠مريضا يعانون من سرعة القذف و تم تقسيم المرضي إلي مجموعتان (مجموعة تم إعطاؤها عقارالاسيتالوبرام ومجموعة تم إعطاؤها عقار السيتالوبرام) و تم إعطاء المرضى الدواء يوميا لمدة ٦ اسابيع بطريقة عشوائية بدون أن يعرف كلا من الطبيب أو المريض إذا كان العقار المعطى عقار الاسيتالوبرام أو السيتالوبرام و تم تقييم كل المرضى قبل وأثناء العلاج كل ١٥يوم لمدة ٦ اسابيع اثناء العلاج وثلاثة اشهر بعد توقف العلاج عن طريق المعامل الصيني للقذف المبكر.

النتائج و الاستنتاج:
- قد أظهرت نتائج البحث أن الفارق بين عقار الاسيتالوبرام و السيتالوبرام ليست ذو دلالة احصائية بعد٦ اسابيع من الاستعمال اليومي للعقاران. وقد استمرت الفاعلية لمدة ثلاثة اشهر بعد توقف العلاج.
- لذلك يعتبر الاسيتالوبرام و السيتالوبرام عقاران فعالان فى علاج مرضى القذف المبكر.