

Which medication is more effective in premature ejaculation: fluoxetine or clomipramine?

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Objective To examine the efficacy of a selective serotonin reuptake inhibitor fluoxetine and tri cyclic antidepressant clomipramine in the treatment of premature ejaculation.

Methods The study comprised 31 patients who attended to the Urology Clinic of the Medical School of Yüzüncü Yıl University with the complaint of premature ejaculation. In this double-blind placebo controlled study, the patients were randomized into treatment groups receiving: Group 1, fluoxetine 20 mg/day for 1 week and 40 mg/day afterwards; Group 2, clomipramine 25 mg/day for 1 week and 50 mg/day afterwards; Group 3, a placebo 1 times a day for 1 week and twice a day afterwards. They were evaluated due

to the latent period of intravaginal ejaculation and side effects of medication.

Results The latent period of intravaginal ejaculation in the fluoxetine and clomipramine groups was significantly longer than the period in the placebo group. Clomipramine was more effective than fluoxetine in the treatment of premature ejaculation.

Conclusion Fluoxetine and clomipramine can be regarded as safe and effective alternatives in the treatment of premature ejaculation. However low dose clomipramine is more effective than fluoxetine in the treatment of this condition.

Key words fluoxetine, clomipramine, premature ejaculation.

Introduction

Premature ejaculation is an uncontrolled ejaculation that does not leave enough time for the couple to get pleasure from sexual act. Sometimes ejaculation occurs before vaginal penetration or even before a full erection is achieved. DSM-IV criteria defines the fact as persistent or recurrent ejaculation with minimal sexual stimulation before, upon or shortly after penetration and before the patient wishes it (1). This definition misses some points such as the number of vaginal thrust before ejaculation and the time between vaginal intromission and ejaculation (intravaginal latency time).

Although there is not yet a consensus on the quantitative evaluation of the fact in clinical practice, it is usually defined in terms of varying duration of intravaginal contact and number of thrusts before ejaculation (2).

There appears to be a great deal of excitement regarding the potential of clomipramine and serotonin reuptake inhibitor drugs to treat rapid ejaculation. In this double-blind, placebo controlled study, we have investigated the efficacy of fluoxetine, a selective serotonin reuptake inhibitor and clomipramine, a tricyclic anti depressant on postponing ejaculation in patients with premature ejaculation.

Material and Method

The study comprises 31 patients with premature ejaculation who attended the Urology Department of Medical School of Yüzüncü Yıl University. They were all married, and the ages ranged from 15 to 50 years. Erectile dysfunction, inhibited orgasm, alcohol and substance abuse and

mental retardation were exclusion criteria. In more than half of the sexual intercourses, the time between vaginal intromission and ejaculation (intravaginal latency time) was less than 2 minutes before treatment. The patients were asked to determine this time by chronometer. They were randomly assigned to 3 groups. Twelve of them received fluoxetine, 11 received clomipramine hydrochloride, while the other 8 received a placebo. Fluoxetine 20 mg/day, clomipramine 25 mg/day and placebo 1 capsule/day were given in the first week, and then fluoxetine was increased to 40 mg/day and clomipramine to 50 mg/day, while placebo to 2 capsules/day. All the patients and their partners were interviewed 3 and 4 weeks after commencing the treatment as well as before the treatment. Measurements of intravaginal latency time, verified by their wives, were recorded. Wilcoxon matched-pairs tests and Analysis of Variance (ANOVA) were used for statistical analysis.

Results

Cessation of the therapy due to the side effects was required in 2 patients receiving fluoxetine. One patient did not follow the instructions regularly. The mean age of the fluoxetine and clomipramine groups were 32.1 ± 8.7 and 31.5 ± 7.3 years respectively, and the mean age of their wives were 27.4 ± 7.4 and 28.2 ± 9.7 years. The mean marriage period of the couples receiving fluoxetine was 9.2 ± 4.6 years and of the couples receiving clomipramine 7.9 ± 4.8 years. The mean ages of placebo group and their wives were 34.3 ± 10.4 years and 30.6 ± 8.4 years respectively. The mean marriage period in the placebo group was 10.5 ± 4.6 . Intravaginal latency time before the treatment was

24.75±11.35 seconds in the fluoxetine group, 27±10.1 seconds in the clomipramine group and 30±8.6 seconds in the control group. The difference between these groups were negligible (ANOVA, $F=0.64, DF=2, 28$ $p=0.53$). Intravaginal latency time increased to 180.25±88.09 seconds in fluoxetine group, 256.81±82.44 seconds in clomipramine and to 60±46.9 seconds in the placebo group 6 weeks after commencing the treatment. The differences were statistically significant (Wilcoxon matched-pairs test; $Z=3.05$ $Z=2.93$ $p<0.005$) in both treatment groups, but not so (Wilcoxon matched-pairs test; $Z=0.21$ $p=0.83$) in the control group. "One-way ANOVA showed that there was a significant difference among posttreatment intravaginal latency times of the groups ($F=22.02$; $df=2, 28$; $p<0.001$). The mean latency time after the treatment of the placebo group was significantly shorter than the other groups (Posthoc Student-Newman-Keuls test, $p<0.001$, Student-Newman-Keuls test, $p<0.001$).

Discussion

Girgis et al (3), in their placebo controlled double-blind study, showed that clomipramine was effective in the treatment of premature ejaculation. They reported anticholinergic side effects, loss of libido and genital anesthesia related with the dose of the drug. Goodman emphasized the efficiency of clomipramine on this condition as well (4). In the recent years there are some other reports indicating the efficacy of clomipramine in the treatment of premature ejaculation (5,6). In these studies, authors suggested that low dose (25-50 mg/day) clomipramine increased intravaginal latency time dramatically. Colpi et al investigated the effectiveness mechanism of clomipramine by neurophysiological tests. After clomipramine treatment, they could not demonstrate any significant difference in sacral evoked response but an increase in the sensory threshold for the stimuli in the genital area (7).

Waldinger et al (8) used a new serotonergic anti depressant paroxetine. There are also reports, one of them is ours, indicating the efficacy of fluoxetine in the treatment of this abnormality (9,10). In this study with fluoxetine, both intravaginal ejaculation latency time and the number of vaginal intromissions before ejaculation increased after 6-week treatment, whereas the patients reported that healing began in the first week of the treatment. Improvement in intravaginal ejaculation latency time with both paroxetine and fluoxetine, which started within the first week of the treatment, implies that it may be a direct effect of central serotonin reuptake inhibition and can not be

ascribed to an antidepressive effect, since the antidepressive effect can not be seen within the first week. Additionally, the improvement in premature ejaculation was not accompanied by a significant decrease in anxiety or depression.

Long term follow-up of the patients could not be achieved, thus we have not enough information whether the symptom reappears after discontinuing the drugs. Althof et al. reported that withdrawal of clomipramine caused ejaculatory latencies to return to baseline (5).

The data show that the serotonin reuptake inhibitor fluoxetine and tri cyclic antidepressant clomipramine can be regarded as an effective alternative to postpone the common sexual dysfunction, premature ejaculation. It seems low dose clomipramine is more effective than fluoxetine in the treatment of this condition.

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