Is Fluoxetine (Prozac®) effective in the treatment of PMS?

Fluoxetine (Prozac®) has been shown to be effective in treating the symptoms of severe premenstrual syndrome (PMS) and premenstrual dysphoric disorder (PMDD). Several small studies have evaluated the efficacy of fluoxetine.[1,2,3,4,5,6,7]

The largest of the studies was conducted by the Canadian Fluoxetine/Premenstrual Dysphoria collaborative Study Group at McMaster University in Hamilton.[2] They found that fluoxetine at a dose of 20mg per day was effective in reducing the symptoms of tension, irritability and dysphoria. Women taking higher doses of 60mg per day reported more side effects then those on lower doses. It should be noted that the study had a high drop-out rate as only 180 of 313 women completed the study.

Intermittent dosing of fluoxetine 20mg/day for 14 days premenstrually only (e.g. during the luteal phase) may also be effective in treating the symptoms of PMDD.[8] However, the study that looked at this was small, non-randomized, non-blinded, and was not placebo controlled. Lower doses of fluoxetine (e.g. alternate day dosing) have been reported anecdotally to benefit some women but studies are lacking.

Side effects reported most commonly in the fluoxetine studies included gastrointestinal irritability, nervousness, insomnia, and sexual dysfunction. These adverse effects may outweigh the potential benefits in some patients.

Other SSRIs: Preliminary studies suggest that paroxetine (5-30mg/day) and sertraline (50-150mg/day) are also effective for PMDD. [9,10] Common side effects with paroxetine included sedation, dry mouth, and nausea, which improved with time. Sexual dysfunction was reported in 50% of participants and did not improve with time.

One study evaluated intermittent dosing of sertraline during the luteal phase only.[11] Although this study demonstrated significant benefit, only 11 of 31 subjects completed the study.

Summary

The SSRIs - fluoxetine, sertraline, and paroxetine - have all demonstrated efficacy in the treatment of PMDD. Their potential usefulness is counterbalanced by common side effects as evidenced by the relatively high drop-out rates in some studies. Intermittent dosing, during the luteal phase only, appears to be successful in small trials.

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