Fluoxetine, a selective serotonin reuptake inhibitor, versus desmopressin in primary monosymptomatic nocturnal enuresis: A randomised controlled trial

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ABSTRACT

Objective: To evaluate the efficacy of fluoxetine 20 mg, a selective serotonin reuptake inhi- bitor, versus the standard treatment, desmopressin 0.2 mg, in primary monosymptomatic nocturnal enuresis (PMNE) treatment.

Patients and methods: This was a single-blinded randomized controlled clinical trial. Children ≥7 years old on urotherapy and who still had severe PMNE were screened for eligibility. Children were maintained on 20 mg of fluoxetine or desmopressin 0.2 mg orally once daily for 3 months. The primary outcome for this trial was to assess the efficacy of both drugs as quantified by the change from baseline in the frequency of nocturnal enuresis at three months. The secondary endpoints were treatment-related side effects and nighttime arousal.

Results: The baseline parameters were comparable between both groups. The response to treatment at 1 month as non-responders (NR), partial responders (PR), and complete respon- ders (CR) was 69%, 24.1%, and 6.9% versus 57.1%, 32.1%, and 10.7% in fluoxetine and desmopressin groups, respectively ($p = 0.65$). At the third month, the NR, PR, and CR were 69%, 31%, and 0% versus 57.1%, 32.1%, and 10.7% in fluoxetine and desmopressin groups, respectively ($p = 0.18$). Nighttime arousal was better in the fluoxetine group (41.4%) versus 14.3% in the desmopressin group, $p = 0.02$, at the first month, and it decreased to 31% in the fluoxetine group versus 14.3% in the desmopressin group, $p = 0.13$, at the third month.

Conclusion: Fluoxetine 20 mg, a selective serotonin reuptake inhibitor, is non-inferior to desmopressin 0.2 mg for the management of PMNE. Fluoxetine improves nighttime arousal significantly at the first month. This improvement becomes insignificant at the third month.