The Efficacy of Citalopram in the Treatment of Functional Abdominal Pain in Children: A Randomized, Double-Blind, Placebo-Controlled Study

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Introduction:
Limited data are available on the effectiveness of antidepressants in the treatment of functional gastrointestinal disorders in children. We evaluated the effectiveness of citalopram in the treatment of childhood functional abdominal pain (FAP).

Material and Methods:
Children with FAP (n=115, aged 6-18 years) received either citalopram 20 mg/day or placebo for 4 weeks. Treatment response was defined as ≥ 2 point reduction in the 6-point pain rating scale or "no pain". Depression, anxiety, somatization, and physician-assessed global severity and improvement were also evaluated. Patients were followed for 8 weeks after medication period.

Results:
Eighty six patients completed the trial (43 in each group). Treatment response rate in the citalopram and the placebo group was 55.8% and 39.5% at week 4 (P=0.097) and 72.0% and 53.4% at week 12 (P=0.059), respectively. Controlling for baseline characteristics, more reduction was observed in pain (z=-2.67, P=0.008) and global severity scores (z=-3.08, P=0.002) in the citalopram group compared with the placebo group. Changes in depression, anxiety, and somatization scores were comparable between the two groups. Receiving citalopram (OR=7.718, P=0.006), father education level (OR=3.179, P=0.040), baseline pain score (OR=5.621, P<0.001), baseline somatization score (OR=0.863, P=0.017), and change in somatization severity (OR=1.168, P=0.039) were predictors of treatment response at week 4. The association of receiving citalopram and treatment response at week 12 was not statistically significant (OR=2.944, P=0.096).

Conclusion:
Four-week treatment with citalopram is effective in reducing pain in children with FAP, independent from patients' baseline psychological status or psychotropic effects of the drug.

Keywords: Abdominal Pain, Antidepressive Agents, Child, Serotonin Reuptake Inhibitors, Randomized Controlled Trial.

Poster Presentation, N 51

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