Sertraline was effective in children and adolescents with obsessive compulsive disorder

March JS, Biederman J, Wolkow R, et al. Sertraline in children and adolescents with obsessive-compulsive disorder. A multicenter randomized controlled trial. *JAMA* 1998 Nov 25;280:1752-6.

Question

In children and adolescents with obsessive compulsive disorder (OCD), what is the short term effectiveness of sertraline?

Design

12 week randomised, double blind, placebo controlled trial.

Setting

12 sites in the US.

Patients

189 patients who were 6–17 years of age and met the *DSM-III-R* diagnostic criteria for OCD, had a score of ≥ 7 on the National Institute of Mental Health Global Obsessive Compulsive Rating Scale (NIMH GOCS) (moderate impairment in global functioning), and a score of ≤ 17 on the Hamilton Depression Scale (no substantial depression). Follow up was 83%.

Intervention

Patients were allocated to 25 mg/day of sertraline (50 mg/d for adolescents) (n=92) or matching placebo (n=95). Dosages were titrated upward by 50 mg/week to a maximum dosage of 200 mg/day during the first 4 weeks of treatment.

Main outcome measures

Mean change from baseline on the Children's Yale-Brown Obsessive Compulsive Scale (CY-BOCS), the National Institute of Mental Health Clinical Global Impression of Severity of Illness (NIMH CGI-S) and Improvement (NIMH CGI-I) scales, and the NIMH GOCS. Responders were defined as having a $>25\%$ decrease in OCD symptoms as measured on the CY-BOCS and much or very much improved on the NIMH CGI scales.

Main results

Using intention to treat analysis, patients who received sertraline showed greater improvement than patients who received placebo on the CY-BOCS ($p=0.005$), the NIMH GOCS ($p=0.02$), and

the NIMH CGI-I scale ($p=0.002$), and a trend toward improvement on the NIMH CGI-S scale ($p=0.09$) (table 1). More patients who received sertraline achieved a 25% decrease in CY-BOCS score ($p=0.03$) and a rating of very much or much improved on the NIMH CGI-I scales ($p=0.02$) (table 2).

Conclusion

Children and adolescents with obsessive compulsive disorder who received sertraline showed improvement in 3 of 4 main dependent measures.

Table 1 Difference in mean decrease from baseline to 12 weeks for sertraline v placebo in obsessive compulsive disorder

Scale	Difference in mean decrease (95% CI)
Children's Yale-Brown Obsessive Compulsive scale (CY-BOCS)	3.4 (1.1 to 5.7)
NIMH Clinical Global Obsessive Compulsive scale	0.9 (0.1 to 1.7)
NIMH Clinical Global Impression Improvement (CGI-I) scale	0.6 (0.2 to 1.0)
NIMH Clinical Global Impression Severity of Illness scale	0.3 (-0.1 to 0.7)*

*Not significant.

Table 2 Sertraline v placebo for decrease in symptoms and global improvement in obsessive compulsive disorder at 12 weeks†

Outcomes	Sertraline	Placebo	RBI (95% CI)	NNT (CI)
25% decrease in CY-BOCS score	53%	37%	45% (4.9 to 101)	6 (3 to 47)
Very much or much improved on CGI scales	42%	26%	61% (7.5 to 144)	6 (3 to 41)

†Abbreviations defined in glossary; RBI, NNT, and CI calculated from data in article.

Source of funding: Pfizer Inc, New York, NY.

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Commentary

This well designed multicentre study by March *et al* provides further support for the therapeutic efficacy of a selective serotonin reuptake inhibitor (SSRI) (ie, sertraline) in the treatment of children and adolescents who have OCD. Given these and other study results, the clinician treating OCD in young people should clearly prescribe an SSRI as the initial pharmacological intervention. Taken as a group, these compounds are safe, efficacious, and have few side effects.

These data, however, raise further questions. One issue of clinical importance not addressed by the study is the effect of SSRIs on sexual functioning.

The high prevalence of delayed orgasm is well known from studies of adults, but this and other potential adverse sexual effects have not been sufficiently investigated in youths. Indeed, little is known about sexual functioning in teens with OCD, and this area should be addressed in future investigations.

Long term use, the effect of medication discontinuation on symptom expression, the effect and role of concurrent psychotherapies (such as cognitive behaviour therapy), and the effect of SSRI treatment on such broader issues as academic functioning, peer and intimate relationships, family functioning, quality

of life, and costs needs to be critically evaluated.

It is heartening to observe the publication of rigorous, well controlled pharmacological trials in the acute treatment of OCD in young people. Given the evidence available to date and the needs of the field, future investigations should not involve "me too" studies of different SSRIs in acute treatment but should address the clinically meaningful issues outlined above.

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