

Obsessive-compulsive disorder: Strategies for using CBT and pharmacotherapy

Eric A. Storch, PhD, and
Lisa J. Merlo, PhD

Departments of Pediatrics
(EAS) and Psychiatry (EAS,
LJM), University of Florida,
Gainesville

Practice recommendations

- Cognitive-behavioral therapy with exposure and response-prevention is effective for the treatment of obsessive-compulsive disorder (OCD) in both children and adults (A).
- Numerous medications are effective options for the treatment of OCD in adults, including serotonergic agents (clomipramine, citalopram, fluoxetine, sertraline, paroxetine, fluvoxamine) (A). Only clomipramine, fluoxetine, fluvoxamine, and sertraline have been approved by the Food and Drug Administration for use in youths (A).

Note: this article is a continuation of "Obsessive-compulsive disorder: Tools for recognizing its many expressions," in the March 2006 issue of JFP.

Evidence supports 2 forms of treatment for adults and children with obsessive-compulsive disorder (OCD): cognitive-behavioral therapy (CBT) with exposure and response prevention (E/RP), and psychopharmacologic treatment with serotonin reuptake inhibitors (SRIs).

OCD Expert Consensus Guidelines strongly recommend exposure-based CBT, alone or with pharmacotherapy, as the first-line treatment.¹ However, approximately 25% of persons with OCD wish

not to participate in CBT for varying reasons (eg, limited insight, difficulty engaging in exposures), thus making medication alone the initial choice of treatment. In many cases, thankfully, patients whose symptoms decrease with medication become willing to participate in CBT.

■ Cognitive-behavioral therapy the preferred route

A large database supports the efficacy of CBT with E/RP in treating OCD. Methodologically rigorous controlled trials of CBT in adults and children have reported success rates reaching 85% (SOR: A).^{2,3} One qualifier of success: though most patients respond positively to CBT, symptoms often remain and true cure or complete remission is often not possible.

CBT is unlike other psychotherapies.

Unfortunately, the number of qualified mental health professionals trained in CBT for OCD is limited,⁴ as is general knowledge about this approach. The Obsessive-Compulsive Foundation estimates that 5 million Americans with OCD lack access to behavioral therapy.⁵ Many of the patients we see in our clinic have participated in psychodynamic or traditional "talk therapies" that are supported by little evidence. Such approaches have a strength of recommendation (SOR) of C. As a result, many afflicted individuals

CORRESPONDENCE

Eric A. Storch, PhD,
Department of Psychiatry,
University of Florida,
Box 100234, Gainesville,
FL 32610. E-mail:
estorch@psychiatry.ufl.edu

receive only partial treatment that consists of either non-CBT psychotherapy or medication.

Preparing the way for your patient

Before referring a patient for CBT, ask about the practitioner's level of training (PhD or PsyD are preferable), theoretical approach (cognitive behavioral vs others, such as psychodynamic or humanistic), and experience in working with OCD patients. Perhaps the most important question to ask a clinician is, "Will you expose the patient to situations that provoke rituals while having him/her refrain from engaging in them?"

What your patients can expect. CBT is a form of psychological treatment explicitly based on learning and cognitive principles. Twelve to 16 sessions are typical, though the function of each individual will determine the duration of treatment.² Treatment may be stopped if significant symptom reduction has lasted for at least 4 consecutive weeks. Thereafter, periodic booster sessions are helpful to maintain gains and prevent relapse.¹

The 3 central aspects of CBT therapy for OCD:

- Exposure—placing the patient in situations that elicit anxiety related to their obsessions
- Response prevention—detering the ritualistic or compulsive behaviors that may serve to reduce or avoid anxiety
- Cognitive therapy—training the patient to identify and reframe anxiety-provoking cognitions.

Exposure—very simply, having the patient face their fear—reduces anxiety responses.

Response prevention involves encouraging the patient to refrain from engaging in repetitive, time-consuming compulsions. This component is based on the notion that rituals serve to reduce anxiety and are thus reinforcing. Naturally, E/RP is quite anxiety-provoking for patients. As a result, it may be useful to inform them that feared situations will be

approached in a hierarchical manner, starting with easier items before moving to more difficult ones. Successful completion of E/RP tasks teaches patients that the feared consequences of not ritualizing are not going to occur.

Cognitive therapy takes into account that patients with OCD have characteristic thoughts believed to contribute to the development and maintenance of their condition. Specifically, common themes within this population include distorted appraisals of risk (eg, "The chance of burning the house down with an extinguished cigarette is 25%"), an inflated sense of responsibility for harm (eg, "If I do not touch this rock, my mother will get cancer"), and pathologic levels of self-doubt (eg, "I know the odds of contracting HIV from using a public toilet are slim, but I can't be sure I will not"). OCD in adults has also been related to the concept of thought-action fusion, in which negative thoughts and actions are seen as synonymous.⁶ Such maladaptive cognitive processes often motivate compulsive behavior and make patients with OCD less able to cope with negative thoughts.⁷ The cognitive component of CBT addresses these issues and teaches patients ways to mend their thinking.

Enlist the family. Finally, family involvement is often central to the success of CBT. Family members may accommodate the patient's symptoms by facilitating avoidance, assisting with ritualistic behaviors, or inadvertently facilitating the development of the disorder by participating in rituals (eg, providing reassurance, allowing compulsive avoidance of feared stimuli, and tolerating delays associated with ritual completion). Given this, CBT often includes the patient's spouse, parents, and significant others.

■ Pharmacotherapy

Malfunction in the serotonin neurotransmitter system is thought to be the physiologic basis of OCD.^{8,9} More specifically, OCD patients are believed to have a

FAST TRACK

Therapy involves the exposure of patients to situations that elicit anxiety, and response prevention that deters compulsive behavior

TABLE

SRI dosing guidelines recommended by the Expert Consensus Panel (1997)

SRI	INITIAL DOSE/INCREMENT FOR INCREASES*	USUAL TARGET DOSE*	MAXIMUM DOSE*	SOR
Clomipramine	10–25 mg/d	100–250 mg/d	250 mg/d	A
Fluoxetine	20 mg/d	40–60 mg/d	80 mg/d	A
Fluvoxamine	50 mg/d	200 mg/d	300 mg/d	A
Paroxetine	10–20 mg/d	50 mg/d	60 mg/d	A
Sertraline	50 mg/d	150 mg/d	225 mg/d	A

lower level of serotonin in neural synapses than healthy persons. Given this, serotonergic agents, such as clomipramine (Anafranil), citalopram (Celexa), fluoxetine (Prozac), sertraline (Zoloft), paroxetine (Paxil), and fluvoxamine (Luvox) have been used extensively to treat OCD in both adults and youths (SOR: **A**). The Food and Drug Administration (FDA) has approved only clomipramine, fluoxetine, fluvoxamine, and sertraline for use in youth. Each receives an SOR of **A**.

Clomipramine: once first choice, now a backup

Until recently, clomipramine—a tricyclic antidepressant—was the most widely prescribed medication for OCD, given its record of providing the greatest and most reliable symptom reduction.¹⁰ The efficacy of clomipramine, which has strong serotonergic properties, has not been replicated with other tricyclic antidepressants (eg, desipramine [Norpramin, Pertofrane]) that more directly target other neurotransmitter systems (serotonin, norepinephrine, and dopamine).¹¹ However, clomipramine, like other tricyclic antidepressants, can cause tachycardia, prolongation of QT interval, and other unpleasant side effects (eg, orthostatic hypotension, constipation, and dry mouth are common). As a result, its use is indicated in cases where the patient does not respond to alternative medications.

SSRIs now favored

Given clomipramine's side effects, selective serotonin reuptake inhibitors (SSRIs), a class of SRIs, have emerged as the first-line medication.¹² For patients who need medication, first consider prescribing an SSRI first.

SSRIs, however, are not without side effects. During the initial phase of treatment, nausea, exacerbations of anxiety, jitteriness, and insomnia are experienced by approximately 35% of patients and may persist over the duration of treatment. These side effects may be limited by slow-dose titration. With fluoxetine, for example, start at 20 mg and gradually increase the dose over several weeks to the usual target dose of 40 to 60 mg.

Some patients require even lower initial doses and more prolonged titration. Extended SSRI treatment has been linked to sexual dysfunction, headache, asthenia, and sweating in 25% to 35% of patients.¹³

Multiple large-scale controlled trials have demonstrated the efficacy and tolerability of SSRIs for adults and youths.^{13,14} About 40% to 55% of patients generally report significant symptom reduction after 12 weeks. However, typical symptom reduction in clinical practice averages only 20% to 50%, and many patients experience residual symptoms after treatment has stopped.

FAST TRACK

Because family members often accommodate the patient's symptoms, they must be involved in the therapy

Course of pharmacotherapy

SSRIs should be gradually titrated. The **TABLE** displays dosing of commonly used SSRIs in adults with OCD. A 12-week trial of an adequate dosage is the standard of care before considering alternative therapies.⁹ Initial response to medications may take 6 to 8 weeks, although the maximal response may take up to 20 weeks. Continue medications for 1 year after achieving a therapeutic response and slowly taper thereafter. Evidence suggests that ongoing CBT may be one method to prevent relapse when discontinuing medication.¹⁵ Most patients do not fully remit on medication treatment alone, and as many as 60% do not have a substantial reduction of symptoms.¹⁶

For cost-effectiveness, CBT still comes out on top

It is suggested that patients continue medication consistently for 2 years before deciding to stop.⁹ Medication would therefore be expected to cost more over the long-term than CBT, given the time-limited nature and durability of the latter.³ To date, several trials have examined the relative efficacy of pharmacotherapy alone versus its combination with CBT. In general, results suggest that CBT alone or in combination with pharmacotherapy (an SRI) is the treatment of choice.^{1,17}

■ CBT plus medication often the better way to go

Given that many patients do not respond adequately to medication alone, augmentation strategies are often necessary. As CBT is considered the most effective approach, this therapy should always be used, particularly when a patient has proven refractory with pharmacological approaches. In cases that are unresponsive to multiple SSRIs and CBT, consider such second-line pharmacological treatments as serotonergic or dopaminergic agents, or adding a second first-line agent.¹³

Dopaminergic augmentation with drugs such as risperidone (Risperdal) or

haloperidol (Haldol), and olanzapine (Zyprexa) have been fairly extensively studied. This approach, which consists of adding a medication that affects the dopaminergic system to the ongoing SSRI, has been well-supported.¹⁸ However, it is unclear as to how long to continue treatment as many patients relapse upon discontinuation⁴⁷ and the antipsychotics are linked to undesirable side effects such as sedation, weight gain, or (particularly with higher doses of risperidone) extrapyramidal effects.

Strategies for adding a second serotonergic medication include switching to a new agent or adding another. Indeed, many patients with an inadequate response to one SSRI may have a favorable response to another.¹⁰

■ Prognosis

Left untreated, the course of obsessive-compulsive disorder is chronic and unremitting, with symptoms generally fluctuating over time due to stress-induced exacerbations of symptoms.¹⁹ Children with this disorder remain at higher risk for other psychiatric problems into adulthood,^{20,21} and adults frequently display additional symptoms as well. Comorbidity with Major Depressive Disorder is particularly common in both children and adults, as are ADHD and other anxiety, mood, and tic disorders.²²⁻²⁴ Symptoms also disrupt family, social, academic, and occupational functioning.²⁵⁻²⁷

Accurate diagnosis of OCD and the identification of a qualified treatment provider remain the 2 major obstacles to treatment of OCD. In one study, the average delay between onset of symptoms and provision of appropriate treatment was 17 years.²⁷ However, once appropriate treatment begins, prognosis for patients with OCD is positive. One meta-analysis demonstrated significant long-term improvement (range, 1-15 years) in pediatric patients receiving any treatment (ie, pharmacological, psychological, or combined) for OCD.²⁸ Other studies have demonstrated that medication generally

FAST TRACK

For patients who need medication, consider an SSRI first—but note that many will experience residual symptoms after treatment has stopped

accounts for significant symptom reduction compared with baseline levels,^{14,15} and 57% to 64% of pediatric patients exhibit no symptoms or subclinical levels of symptoms at follow-up.^{29,30} Studies of adults have also demonstrated significant symptom reduction,¹² with about 50% of patients responding to medication.³¹ In addition, numerous studies have demonstrated that CBT is as effective or more effective than pharmacotherapy alone for both children and adults.^{12,15,31}

As noted previously, upwards of 85% of patients improve significantly with CBT.^{3,31} Thus, CBT alone or combined with medication has the best prognosis for children and adults.

REFERENCES

- Foa EB, Liebowitz MR, Kozak MJ, et al. Randomized, placebo-controlled trial of exposure and ritual prevention, clomipramine, and their combination in the treatment of obsessive-compulsive disorder. *Am J Psychiatry* 2005; 162:151-161.
- Franklin ME, Foa EB. Cognitive behavioral treatments for obsessive compulsive disorder. In Nathan PE, Gorman JM, eds: *A Guide to Treatments that Work*. New York: Oxford University Press; 2002:367-386.
- Barrett P, Healy-Farrell L, March JS. Cognitive-behavioral family treatment of childhood obsessive-compulsive disorder: A controlled trial. *J Am Acad Child Adolesc Psychiatry* 2004; 43:46-62.
- Simonds LM, Elliott SA. OCD patients and non-patient groups reporting obsessions and compulsions: phenomenology, help-seeking, and access to treatment. *Brit J Med Psychol* 2001; 74:431-449.
- BTI benefits. Obsessive-Compulsive Foundation website. Available at: www.ocfoundation.org/ocf1130d.htm. Accessed on February 2, 2006.
- Rachman S. Obsessions, responsibility and guilt. *Behav Res Therapy* 1993; 31:149-154.
- Piacentini J, Langley AK. Cognitive-behavioral therapy for children who have obsessive-compulsive disorder. *J Clin Psychol* 2004; 60:1181-1194.
- Insel TR, Mueller EA, Alterman I, Linnoila M, Murphy DL. Obsessive-compulsive disorder and serotonin: Is there a connection? *Biol Psychiatry* 1985; 20:1174-1188.
- Goodman WK. Obsessive-compulsive disorder: Diagnosis and treatment. *J Clin Psychiatry* 1999; 60(suppl 18):27-32.
- Leonard HL. New developments in the treatment of obsessive-compulsive disorder. *J Clin Psychiatry* 1997; 58(suppl 14):39-47.
- Leonard HL, Swedo SE, Rapoport JL. Treatment of childhood obsessive-compulsive disorder with clomipramine and desipramine: A double-blind crossover comparison. *Arch Gen Psychiatry* 1989; 46:1088-1092.
- Abramowitz JS. Effectiveness of psychological and pharmacological treatments for obsessive-compulsive disorder: A quantitative review. *J Consult Clin Psychol* 1997; 65:44-52.
- Nutt DJ. Overview of Diagnosis and drug treatments of anxiety disorders. *CNS Spectrums* 2005; 10:49-56.
- Geller DA, Biederman J, Stewart SE, et al. Which SSRI? A meta-analysis of pharmacotherapy trials in pediatric obsessive-compulsive disorder. *Am J Psychiatry* 2003; 160:1919-1928.
- Tolin DF, Maltby N, Diefenbach GJ, et al. Cognitive-behavioral therapy for medication nonresponders with obsessive-compulsive disorder: A wait-list controlled open trial. *J Clin Psychiatry* 2004; 65:922-931.
- McDougal CJ. Update on pharmacological management of OCD: Agents and augmentation. *J Clin Psychiatry* 1997; 57(suppl 12):11-17.
- POTS: Cognitive-behavioral therapy, sertraline, and their combination for children and adolescents with obsessive-compulsive disorder. *JAMA* 2004; 292:1969-1976.
- Maina G, Albert U, Ziero J, Bogetto F. Antipsychotic augmentation for treatment-resistant obsessive-compulsive disorder: What if antipsychotic is discontinued? *Internation Clin Psychopharmacol* 2003; 18:23-28.
- Practice parameters for the assessment and treatment of children and adolescents with obsessive-compulsive disorder. *J Am Acad Child Adolesc Psychiatry* 1998; 37:27S-45S.
- Bolton D, Luckie M, Steinberg D. Long-term course of obsessive-compulsive disorder treated in adolescence. *J Am Acad Child Adolesc Psychiatry* 1995; 34:1441-1450.
- Hanna GL. Demographic and clinical features of obsessive-compulsive disorder in children and adolescents. *J Am Acad Child Adolesc Psychiatry* 1995; 34:19-28.
- Horwath E, Weissman M. The epidemiology and cross-national presentation of obsessive-compulsive disorder in childhood. *J Am Acad Child Adolesc Psychiatry* 2000; 19:134-144.
- March JS, Leonard HL. Obsessive-compulsive disorder in children and adolescents: A review of the past 10 years. *J Am Acad Child Adolesc Psychiatry* 1996; 35:1265-1273.
- Peterson BS, Pine DS, Cohen P, Brooks JS. Prospective, longitudinal study of tic, obsessive-compulsive, and attention-deficit/hyperactivity disorders in an epidemiological sample. *J Am Acad Child Adolesc Psychiatry* 2001; 40:685-695.
- Koran L, Thienemann M, Davenport R. Quality of life for patients with obsessive-compulsive disorder. *Am J Psychiatry* 1996; 153:783-788.
- Calvacoressi L, Lewis B, Harris M, et al. Family accommodation in obsessive-compulsive disorder. *Am J Psychiatry* 1995; 152:441-443.
- Hollander E, Kwon JH, Stein DJ, Broatch J, Rowland CT, Himelein CA. Obsessive-compulsive and spectrum disorders: Overview and quality of life issues. *J Clin Psychiatry* 1996; 19:134-144.
- Stewart SE, Geller DA, Jenike M, et al. Long-term outcome of pediatric obsessive-compulsive disorder: A meta-analysis and qualitative review of the literature. *Acta Psychiatrica Scandinavica* 2004; 110:4-13.
- Leonard HL, Swedo SE, Lenane MC. A two to seven year follow-up study of 54 obsessive compulsive children and adolescents. *Arch Gen Psychiatry* 1993; 50:429-439.
- Wewetzer C, Jans T, Muller B, et al. Long-term outcome and prognosis of obsessive-compulsive disorder with onset in childhood or adolescence. *Europ Child Adolesc Psychiatry* 2001; 10:37-46.
- Foa EB, Franklin ME, Moser J. Context in the clinic: How well do cognitive-behavioral therapies and medications work in combination? *Biolog Psychiatry* 2002; 52:987-997.

FAST TRACK

Accurate diagnosis and finding a qualified treatment provider are the 2 main obstacles to the treatment of OCD