# Obsessive-Compulsive Disorder In Childhood: A Behavioral Approach To Management

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Obsessive-compulsive disorder is characterized by obsessions or compulsions. Obsessions are unwanted and senseless thoughts, images, or impulses that occur repeatedly. Obsessions are experienced as unwanted and involuntary by the patient and can focus on such themes as contamination, aggression, orderliness, religion, sex, doubt, or loss of possessions. Compulsions are ritualistic but seemingly purposeful behaviors that are often performed in response to an obsession. These compulsive behaviors, either observable or mental, alleviate or neutralize anxiety associated with the obsession. The patient fears the outcome should he or she not perform the ritual, despite the knowledge that the fear is irrational. Because the ritual does not entirely relieve the fear, the impulse to repeat the ritual returns. Common compulsive behaviors include hand-washing, checking, arranging, touching, repeating, or hoarding. Table 1 summarizes diagnostic criteria according to the American Psychiatric Association.1

Obsessive-compulsive disorder occurs at some point during a lifetime in approximately 2.5 to 3 percent of the population; it is equally common in men as in women, and one-third of the cases begin by the age of 15 years.<sup>2</sup> As with many other psychiatric illnesses, patients might not seek care until years after the onset of the disease. A variety of causes have been proposed: behavioral, developmental, biochemical, psychological, and genetic. Familial tendencies have been seen in obsessive-compulsive disorder. In one sample of children with obsessive-compulsive disorder, 71 percent had a parent with either full-blown obsessive-compulsive disorder or obsessive-compulsive symptoms.3 The symptoms of obsessive-compulsive disorder have also previously been viewed as extreme variants of normal developmental rituals

and superstitiousness. Children with obsessivecompulsive disorder have not been found to differ in the number or type of superstitions when compared with normal children; nor have other (nonobsessive-compulsive disorder) ritualistic behaviors been noted in their early development.4 Obsessive-compulsive disorder has been linked to abnormalities in computer-aided tomography scanning, electroencephalograms, positron emission tomography, and evoked potentials, but these abnormalities are neither consistent with nor pathognomonic of obsessive-compulsive disorder. Nevertheless, one study of 41 medicationfree patients with obsessive-compulsive disorder and matched controls found more signs of central nervous system dysfunction in obsessive-compulsive disorder patients.5

This disorder is often treated with behavioral therapy, pharmacologic therapy, or both. As many as 90 percent of patients can be helped by treatment with behavioral therapy and drug treatment, used sequentially or concurrently.6 Drugs that inhibit serotonin uptake are the most effective and are reported to reduce symptoms by 30 to 42 percent.<sup>5</sup> Generally, the drug of choice is clomipramine, starting at 25 mg daily and increasing to a daily maximum dose of 100 mg for pediatric and adolescent patients. The safety and efficacy of this medication are not known for children under the age of 10 years. There has also been some success with other serotonin-uptake inhibitors (fluoxetine, sertraline, and paroxetine), although obsessive-compulsive disorder is not an indicated use for these medications. The key behavioral interventions are exposure and response prevention, in which the patient learns to confront the trigger for anxiety and then delay, diminish, and discontinue the ritual.<sup>7</sup> Obsessivecompulsive disorder can have a chronic and relapsing course.8 Because of the prevalence and the disabling nature of the disorder, it is important for family physicians to be aware of the presentation and treatment of obsessive-compulsive disorder.

Submitted, revised, 12 May 1993.

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Table 1. Diagnostic Criteria for Obsessive-Compulsive Disorder According to the *DSM-III-R*.

## A. Either obsessions or compulsions

### Obsession

- Recurrent and persistent ideas, thoughts, impulses, or images that are experienced, at least initially, as intrusive and senseless
- The person attempts to ignore or suppress such thoughts or impulses or to neutralize them with some other thought or action
- The person recognizes that the obsessions are the product of his or her own mind, not imposed from without
- If another Axis I disorder is present, the content of the obsession is unrelated to it

### Compulsions

- Repetitive, purposeful, and intentional behaviors that are performed in response to an obsession or according to certain rules or in a stereotyped fashion
- The behavior is designed to neutralize or to prevent discomfort or some dreaded event or situation; however, either the activity is not connected in a realistic way with what it is designed to neutralize or prevent, or it is clearly excessive
- The person recognizes that his or her behavior is excessive or unreasonable (this may not be true for young children; it may no longer be true for persons whose obsessions have evolved into overvalued ideas)
- B. The obsessions or compulsions cause marked distress, are time-consuming (take more than 1 hour a day), or significantly interfere with the person's normal routine, occupational functioning, or usual social activities or relationships

NOTE: Reprinted with permission from the American Psychiatric Association.<sup>1</sup>

# Case Report

A 9-year-old boy complaining of upper respiratory tract symptoms was brought to his physician for treatment. At the end of the physical examination, the patient's mother mentioned that he would not sit on furniture or touch doorknobs at home and that he was also washing his hands frequently. The problem started 2 months before the visit, when a neighbor had told the boy about bats and their association with rabies following a sighting of bats in the family's backyard. The patient became obsessed with a fear of contracting rabies and began to wash his hands frequently (20 to 30 times each day) in addition to the avoidance behaviors described. Interestingly, these compulsive behaviors did not occur at school.

Findings on the physical examination were unremarkable with the exception of rhinorrhea. The skin of the hands was intact. The family had no history of psychiatric illness. Treatment was offered for the obsessive-compulsive disorder, and the patient and his mother agreed. A follow-up session was arranged with the family and the authors, a family practice resident, and a clinical psychologist.

At the family meeting, additional history was obtained. The boy's older sister expressed frustration about having to open doors for her brother, because he would not touch doorknobs. At times he would remain outside for extended periods until a door was opened for him. His mother was concerned about the amount of time that the patient spent in the family's only bathroom. These symptoms persisted despite the family's reassurance to the patient that he had no reason to fear contracting rabies or to perform these compulsive behaviors.

We initially provided information about the transmission and prevalence of rabies. Strategies were devised to implement response prevention, a key behavioral treatment modality for obsessive-compulsive disorder.9 If the patient can be prevented from performing the rituals, he will have the opportunity to realize that exposure to the feared stimulus does not produce the dreaded consequence despite nonperformance of the ritual. This realization should lead to reduced anxiety (after an initial, but brief, increase in anxiety) and consequently to a decreased need to perform the activity. One response prevention tactic used was distraction; the family was encouraged to help the boy to do other things when he experienced an urge to wash. A small, hand-held electronic game was purchased by the family as one such tactic. This distraction facilitated the boy's agreement to try to limit hand-washing to before meals and after toileting, plus one extra time as needed per day. Obsessive-compulsive disorder patients, especially long-term sufferers, often need such explicit retraining in matters relating to their rituals, e.g., how often one "should" wash hands. The family also expressed fears that the patient was crazy; they were reassured that obsessive-compulsive disorder is a treatable problem and were encouraged to follow the treatment regimen.

One month later the patient and his family returned for a follow-up visit with us. They reported that hand-washing had decreased to the agreed-upon frequency. The patient had also felt confident enough to begin to sit on household furniture again. The family reported, however, that he continued to refuse to open doors. Education on rabies transmission was repeated, and the

patient was encouraged to practice door opening in the session. He was able to comply and was enthusiastically praised for this, as well as for his other successes. Prescribed homework included the preservation of progress gained by means of continued response prevention in the form of handwashing and practicing door opening. In a telephone conversation 1 month later, the boy's mother proclaimed him to be cured and therefore not in need of keeping his next appointment. One year later the patient continued to be symptom-free.

# Discussion

Obsessive-compulsive disorder is a common disorder that can occur in childhood.2 Prompt recognition and treatment can lead to rapid resolution of symptoms, as occurred in this case. Routine inquiry during the review of systems regarding recurrent, intrusive thoughts or repetitive rituals can increase detection. The Yale-Brown Obsessive Compulsive Scale (Y-BOCS)<sup>10</sup> is also available as a screening tool for this disorder.3 The core behavioral intervention was response prevention, which enabled the patient to be exposed to the feared stimulus and eventually to habituate to it. The family provided distraction, which was an important aid in helping the patient not to wash. It should be noted, however, that distraction must be used carefully. The patient needs to experience his anxiety to habituate to it, so distraction must be titrated to facilitate response prevention while still allowing some experience of anxiety.

In treating obsessive-compulsive disorder, the therapeutic alliance with the physician is important in that the patient has to trust that the anxiety will diminish if he or she perseveres in response prevention. In cases of overwhelming anxiety in the face of any response prevention, concurrent antiobsessional medication might be indicated. Despite the successful treatment of this case, it should be noted that many cases are more resistant to treatment, especially those patients who are older at the onset of symptoms and those who are also severely depressed. Overall, 75 percent of patients with obsessive-compulsive disorder who are treated behaviorally improve, and a better initial response is associated with better longterm results.7 The involvement of the family is an important aspect of treatment for obsessive-compulsive disorder, especially with pediatric patients.

In one study obsessive-compulsive disorder patients treated behaviorally with a family member involved in the treatment showed greater improvement in anxiety, obsessive symptoms, and social adjustment to household and occupational responsibilities than did patients treated alone.<sup>11</sup> As was seen in this case, it is important to discourage the family from assisting in the patient's rituals (e.g., opening the door for him) or even from providing verbal reassurance about obsessive worries, as this can undermine behavioral treatment by helping the patient to avoid the necessary contact with the feared stimulus. Effective behavioral, pharmacological, and family strategies for the treatment of obsessive-compulsive disorder can be mastered and used by family physicians.

A number of excellent references are available for physicians desiring information beyond the scope of this brief report.<sup>6,12,13</sup> Information for patients and their families is available from the American Psychiatric Association<sup>14</sup> and from the Obsessive-Compulsive Disorder Foundation.\*

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