Sometimes called the equivalent of mental hiccups, this disorder can be quite debilitating for some people. Unfortunately people with a heightened sense of conscientiousness, people found often in your care, seem more susceptible to this disorder. One woman in my practice washed her hands 75 times or more a day. One man had to collect health insurance policies he didn’t need or use. Another man who was obsessive but not compulsive, a conditioned found in about 25% of OCD, used to drop from his tractor in agony at the obsessive thought that he "must kill" his children.

This is a serious but treatable disease or disorder that is frequently under diagnosed. Hoarding is one of its most interesting manifestations. Watch for this in people in your care.

Helping Hearts Heal

Dan L. Boen, Ph.D., HSPP, Licensed Psychologist
Director of Christian Counseling Centers of Indiana

Recognition and Treatment of Obsessive-Compulsive Disorder

MARK F. EDDY, PH.D., and GORDON S. WALBROEHL, M.D. Wright State University School of Medicine, Dayton, Ohio A patient information handout on obsessive-compulsive disorder, written by the authors of this article, is provided on page 1632.

Obsessive-compulsive disorder is relatively common; however, its actual incidence has only recently become clear. The neurotransmitter serotonin appears to have a central role in this disorder. Males and females are affected equally, with onset usually occurring in late adolescence. Symptoms include intrusive thoughts that lead the patient to perform repetitive rituals that interfere with daily living. Although patients are typically distressed by these thoughts and rituals, they seldom volunteer their symptoms. Successful diagnosis often requires specific questioning by the physician. Treatment is directed at symptom reduction; however, complete remission of symptoms is unusual. Pharmacologic therapy usually includes clomipramine or antidepressant treatment with selective serotonin reuptake inhibitors, but in dosage ranges higher than those typically used in the treatment of depression. Behavior therapy has also been proved effective, both alone and in conjunction with pharmacologic therapy.

Recent advances in the understanding of obsessive-compulsive disorder have highlighted the role of the family physician in the management of this condition. At one time considered rare, obsessive-compulsive disorder is now recognized as relatively common, exceeding the lifetime prevalence of more visible disorders such as schizophrenia.1,2 Consequently, most family physicians can expect to see patients with this disorder in their practices. Despite its earlier reputation as a disorder highly resistant to treatment, a number of effective treatment approaches now exist for obsessive-compulsive disorder.

Diagnostic Criteria
Typical obsessional themes include thoughts of contamination by dirt or germs, worries that the doors are unlocked or the stove has been left on, and intrusive
images of family members being injured or killed.

Diagnostic criteria for obsessive-compulsive disorder, according to the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV), appear in Table 1.3 The criteria allow for either obsessions or compulsions, but both are usually present. Obsessions are defined as distressing ideas, images or impulses that repeatedly intrude into the patient's awareness. These thoughts are typically experienced as inappropriate, anxiety-arousing and contrary to the patient's will or desires (i.e., ego dystonic). Typical obsessional themes include thoughts of contamination by dirt or germs, worries that the doors are unlocked or the stove has been left on, or intrusive images of family members being hurt or killed.

Compulsions, on the other hand, are repetitive behaviors or rituals that the patient performs to counteract the anxiety and distress produced by obsessive thoughts. Consequently, a direct relationship between the compulsory behavior and the obsession that triggers it typically exists (Table 2).4 Patients are often aware that their compulsive behavior is excessive or irrational but, nonetheless, feel driven to perform it. Typical compulsions include excessive hand washing, repetitive checking rituals (e.g., of door locks) and repetitive prayers for protection.

### TABLE 1
**Diagnostic Criteria for Obsessive-Compulsive Disorder**

<table>
<thead>
<tr>
<th>Either obsessions or compulsions:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Obsessions as defined by (1), (2), (3) and (4):</td>
</tr>
<tr>
<td>Recurrent and persistent thoughts, impulses, or images that are experienced, at some time during the disturbance, as intrusive and inappropriate and that cause marked anxiety or distress</td>
</tr>
<tr>
<td>The thoughts, impulses or images are not simply excessive worries about real-life problems</td>
</tr>
<tr>
<td>The person attempts to ignore or suppress such thoughts, impulses, or images, or to neutralize them with some other thought or action</td>
</tr>
<tr>
<td>The person recognizes that the obsessional thoughts, impulses or images are a product of his or her own mind (not imposed from without as in thought insertion)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Compulsions as defined by (1) and (2):</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Repetitive behaviors (e.g., hand washing, ordering, checking) or mental acts (e.g., praying, counting, repeating words silently) that the person feels driven to perform in response to an obsession, or according to rules that must be applied rigidly</td>
</tr>
<tr>
<td>(2) The behaviors or mental acts are aimed at preventing or reducing distress or preventing some dreaded event or situation; however, these behaviors or mental acts either are not connected in a realistic way with what they are designed to neutralize or prevent or are clearly excessive</td>
</tr>
</tbody>
</table>

At some point during the course of the disorder, the person has recognized that the obsessions or compulsions are excessive or unreasonable. Note: this does not apply to children.

The obsessions or compulsions cause marked distress, are time consuming (take more than one hour a day), or significantly interfere with the person's normal routine, occupational (or academic) functioning, or usual social activities or relationships.
If another Axis I disorder is present, the content of the obsessions or compulsions is not restricted to it (e.g., preoccupation with food in the presence of an eating disorder; hair pulling in the presence of trichotillomania; concern with appearance in the presence of body dysmorphic disorder; preoccupation with drugs in the presence of a substance use disorder; preoccupation with having a serious illness in the presence of hypochondriasis; preoccupation with sexual urges or fantasies in the presence of a paraphilia; or guilty ruminations in the presence of major depressive disorder).

The disturbance is not due to the direct physiological effects of a substance (e.g., a drug of abuse, a medication) or a general medical condition. Specify if: With poor insight: if, for most of the time during the current episode, the person does not recognize that the obsessions and compulsions are excessive or unreasonable


It is important to recognize that compulsive rituals are not limited to overt behaviors. The patient who appears to be free of compulsive rituals may be performing covert rituals, such as mentally repeating or visualizing phrases, prayers or images.

Epidemiology and Etiology

TABLE 2

Typical Correlations Between Obsessions and Compulsions

<table>
<thead>
<tr>
<th>Obsessions</th>
<th>Compulsions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contamination</td>
<td>Hand washing; cleaning</td>
</tr>
<tr>
<td>Aggressive</td>
<td>sexual, religious, somatic (e.g., physical health or functioning)</td>
</tr>
<tr>
<td>Symmetry</td>
<td>Ordering and arranging, counting, repeating rituals</td>
</tr>
<tr>
<td>Hoarding</td>
<td>Hoarding and collecting</td>
</tr>
</tbody>
</table>


As recently as 1985, the prevalence of obsessive-compulsive disorder was estimated at approximately 0.05 percent of the population. Another, more recent study suggested the much higher lifetime prevalence of 2.5 percent, although some have considered this figure to be inflated. Age of onset is usually during late adolescence or early adulthood, and the disorder occurs with equal frequency in males and females. Presentation in childhood may occur, while onset in late adulthood is rare. The disorder is usually chronic, and complete elimination of all symptoms is uncommon, even in patients receiving appropriate treatment.

The etiology of obsessive-compulsive disorder is uncertain, but it appears to include a combination of neurologic and psychologic factors. The dominant neurochemical theory of obsessive-compulsive disorder suggests that the neurotransmitter serotonin plays a central role in the development of the condition. Drugs that increase the availability of serotonin in the body are effective in ameliorating the symptoms of obsessive-compulsive disorder, while
nonserotonergic medications have been found to have little or no effect.

**Clinical Presentation**
In some instances, such as when the patient presents to the physician’s office because of the concern of a family member or friend, the symptoms of obsessive-compulsive disorder may be readily presented. More commonly, however, the patient’s embarrassment and fears concerning his or her behavior cause reluctance to disclose symptoms. As a result, the disorder may not come to the physician’s attention until the patient presents with a secondary physical symptom (e.g., dry skin resulting from repetitive hand washing).

**TABLE 3**
Sample Interview Questions for Patients Suspected of Having Obsessive-Compulsive Disorder

Do you ever find that certain thoughts or images keep coming into your head even though you try to keep them out?
Do these thoughts "make sense" to you or do they seem absurd or silly?
What do you do to try to get rid of or counteract these thoughts?
Do you sometimes feel like you have to do certain things over and over even though you don't want to?
Does repeating these actions seem reasonable to you or does it seem excessive?

If the physician suspects the patient of having obsessive-compulsive disorder, a supportive, nonthreatening approach is best (Table 3). For example, the physician might say to the patient, "I sometimes see this problem (dry hands) in folks who wash their hands very frequently. Do you feel you wash your hands more often than other people do?" Most often, however, no obvious secondary physical symptoms are noticeable, and successful diagnosis must be based on specific questioning by the physician when the patient is suspected of possible obsessive-compulsive disorder.

**Diagnostic Evaluation**
Laboratory studies are not useful in the diagnosis of obsessive-compulsive disorder. A clinical interview that elicits a history of intrusive thoughts or behavioral rituals is the primary method of establishing the diagnosis. Psychometric instruments, such as the Yale-Brown Obsessive Compulsive Scale, are available, but the time required to administer them reduces their usefulness for the practicing physician.

**Differential Diagnosis**
The differential diagnosis of obsessive-compulsive disorder includes depressive disorders, generalized anxiety disorder and hypochondriasis. Although these disorders may present with symptoms resembling those of obsessive-compulsive disorder, differences between these disorders and obsessive-compulsive disorder have been noted. For example, the ruminative thoughts of depressed
patients may be differentiated from obsessive preoccupations in that depressed patients usually do not consider their thoughts absurd or alien and make no attempt to block or avoid them. The patient with depression who is preoccupied with the thought "I am worthless" experiences this thought as reasonable and accepts it as part of himself or herself. On the other hand, the patient with obsessive-compulsive disorder who is preoccupied with the thought "If I touch a public telephone I will become contaminated and infect my children" will often consider this thought to be absurd and foreign.

The presence of obsessive-compulsive rituals helps distinguish obsessive-compulsive disorder from other obsessional disorders.

Patients with generalized anxiety disorder may present with excessive worries that resemble obsessive thinking; however, they usually consider these worries to be realistic and appropriate rather than absurd. Sometimes the patient with obsessive-compulsive disorder has obsessional concerns that become so intense and irrational that the patient may appear to be psychotic. However, true obsessions are almost always accompanied by some form of compulsive ritual, whereas this is not usually the case in patients with delusional thinking.

Of particular importance in the family practice setting is the ability to differentiate between obsessive-compulsive disorder and hypochondriasis. Patients with hypochondriasis may present with unrealistic preoccupations with physical disease that closely resemble obsessive ruminations. In addition, somatic checking rituals and frequent visits to the physician's office for reassurance may play an anxiety-reducing role similar to that of compulsive rituals. Typically, however, the patient with hypochondriasis will not present with apparent compulsive rituals. In those cases where the patient does present with ritual behavior designed to decrease the anxiety associated with the somatic ruminations, a diagnosis of obsessive-compulsive disorder may be appropriate.

Behavior therapy may be 80 to 90 percent effective in treating obsessive-compulsive disorder.

Patients with other psychiatric disorders may also present with symptoms resembling those of obsessive-compulsive disorder. For example, patients with anorexia nervosa or body dysmorphic disorder may have obsessive preoccupations with physical appearance, but these are not considered manifestations of obsessive-compulsive disorder because they occur in the context of another psychiatric disorder. The "compulsive" behavior of pathologic gamblers or substance abusers differs from true compulsions in that the patient typically finds them pleasurable, at least initially. The diagnosis of obsessive-compulsive personality disorder, with its preoccupation with orderliness and perfectionism, is often confused with obsessive-compulsive disorder but may be distinguished from it by its lack of obsessions or compulsions and by its unresponsiveness to psychotropic medications.

**Treatment**

The past failure of traditional psychodynamic psychotherapy and unsuccessful early attempts at pharmacotherapy created the impression that obsessive-
compulsive disorder was highly treatment resistant. More recently, effective psychologic and pharmacologic treatment methods have been recognized.

**Psychopharmacologic Methods**

Medications that inhibit serotonin reuptake have been found to be effective in the treatment of obsessive-compulsive disorder. Clomipramine (Anafranil), a tricyclic antidepressant, was the first drug shown to have a significant effect on the symptoms of obsessive-compulsive disorder. However, as with other tricyclic medications, it is not without serious side effects. The advent of selective serotonin reuptake inhibitors (SSRIs) has changed the treatment of obsessive-compulsive disorder dramatically. These medications have fewer side effects and are also familiar to the practicing family physician.

A large meta-analysis comparing clomipramine with the SSRIs indicated that, while all medications studied were more effective than placebo, clomipramine was significantly more effective. Surprisingly, in spite of the potential for more side effects, fewer patients in the clomipramine group dropped out of the study. The drug dosages used to treat patients with obsessive-compulsive disorder are higher than those routinely used to treat depression (Table 4); therefore, side effects are more likely to become a problem. Common side effects of clomipramine include sedation, anticholinergic effects (dry mouth, blurry vision, orthostasis), weight gain, sexual dysfunction (impotence) and cardiac conduction delays. Side effects associated with SSRIs include insomnia, akathisia (motor restlessness), nausea and diarrhea.

**TABLE 4**

Comparison of Medical Treatment of Obsessive-Compulsive Disorder and Depression

<table>
<thead>
<tr>
<th>Depression</th>
<th>Obsessive-compulsive disorder</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agents</td>
<td>Usual daily dosage (mg) Dosage range (mg)</td>
</tr>
<tr>
<td>Clomipramine (Anafranil)*</td>
<td>--</td>
</tr>
<tr>
<td>Fluoxetine (Prozac)</td>
<td>2040 to 80</td>
</tr>
<tr>
<td>Fluvoxamine (Luvox)*</td>
<td>--</td>
</tr>
<tr>
<td>Paroxetine (Paxil)</td>
<td>2020 to 60</td>
</tr>
<tr>
<td>Sertraline (Zoloft) †</td>
<td>5050 to 200</td>
</tr>
</tbody>
</table>

*--Not labeled by the U.S. Food and Drug Administration (FDA) for the treatment of depression. †--Not FDA-labeled for the treatment of obsessive-compulsive disorder.

In general, therapy for obsessive-compulsive disorder must be based on several factors. It is important to remember that, in most cases, symptoms will be reduced but not eliminated. Even in studies with the best treatment results, time spent on rituals was reduced by only 60 to 70 percent. It is important to note that the termination of pharmacotherapy will almost always result in the return of symptoms, suggesting the need for long-term treatment or the addition of nonpharmacologic treatment strategies.
Psychologic Methods
Successful psychologic methods for the treatment of obsessive-compulsive disorder have almost exclusively involved some variation of behavior therapy based on exposure of the patient to the feared object or obsession.9,12 Patients are increasingly exposed to the stimuli they usually avoid (e.g., “contaminated” objects) while being prevented from performing any of their usual anxiety-reducing rituals. Treatment is usually brief (i.e., 10 weeks). Family members may be included in the treatment process when the patient's behavior is disrupting the family system or when family members are supporting the patient's disorder (e.g., by engaging in cleaning rituals at the patient's request). Exposure techniques can be very difficult for patients and their families. In most cases, patients with obsessive-compulsive disorder do best when referred to a mental health professional with specific training in this type of behavior therapy.

Unlike other psychotherapeutic approaches, behavior therapy has consistently been shown to be effective in the treatment of obsessive-compulsive disorder.13 Eighty to 90 percent of patients with obsessive-compulsive disorder have been classified as improved after behavior therapy11 (although many of the treatment studies have not employed the more rigorous outcome measures used in recent pharmacology trials). As with pharmacologic approaches, obsessive-compulsive symptoms are most often reduced rather than completely eliminated.

Psychopharmacologic vs. Psychotherapeutic Methods
Both methods of treatment are effective, and each has its own strengths and weaknesses. Drug treatment is relatively easy to administer and does not cause significant patient discomfort. Behavior therapy, on the other hand, eliminates concerns about medication side effects and produces results that may be better maintained after medical treatment is terminated.

Recent guidelines for the treatment of obsessive-compulsive disorder12 indicate that when overall efficacy of treatment is the primary concern, behavior therapy combined with an SSRI is the treatment of choice in patients with severe obsessive-compulsive disorder, whereas behavior therapy may be used alone in patients with milder cases of the disorder. However, reports in the literature on the effectiveness of combined therapy versus single therapy have been mixed.14 In many cases the patient may be the best guide to determining which approach to use. Some patients may be very willing to take medication to treat a "medical" problem that is due to a deficiency of serotonin, yet balk at the idea of behavior therapy. Others may be horrified at the thought of taking “mind-control drugs,” yet may be perfectly willing to work with a psychologist in behavior therapy. Since both methods can be effective, it may be useful to describe the features of each type of treatment and let the patient choose.

Early Detection
The prevention of obsessive-compulsive disorder remains largely unexplored, in part because of uncertainty regarding the causes of the problem. Given that the disorder usually begins in adolescence or early adulthood, the family physician
might consider screening patients in this age group who present with anxiety symptoms, depression or parental complaints of excessive meticulousness, cleanliness or behavior peculiarities (e.g., refusal to touch certain objects, rigid rules regarding the ways food must be prepared). Identification of obsessive-compulsive disorder in these patients may provide an opportunity to intervene before the disorder becomes well-established.

**Final Comment**

Obsessive-compulsive disorder is a serious and relatively common disorder that can easily escape the family physician's attention and is seldom voluntarily disclosed by patients. Although once considered highly unresponsive to treatment, the physician now has a number of treatment options and can offer the patient a hopeful prognosis for significant improvement. Pharmacotherapy and behavior therapy may be applied either individually or in combination. A referral to a mental health professional is indicated when specialized behavior therapy is desired.

Each year members of a different medical faculty prepare articles for “Practical Therapeutics.” This article is one in a series from the Department of Family Medicine at Wright State University School of Medicine, Dayton, Ohio. Guest editors of the series are Cynthia G. Olsen, M.D., and Gordon S. Walbroehl, M.D.

**The Authors**

**MARK F. EDDY, PH.D.**, is an assistant professor in the Department of Family Medicine at Wright State University School of Medicine, Dayton, Ohio. He is also director of behavioral science at the St. Elizabeth Family Practice Residency at the Franciscan Medical Center, Dayton Campus. He received his doctorate in clinical psychology from Michigan State University, East Lansing.

**GORDON S. WALBROEHL, M.D.**, is professor and vice chair of academic and community development in the Department of Family Medicine at Wright State University School of Medicine. He received his medical degree from the UMDNJ-New Jersey Medical School, Newark, and completed a residency in family medicine at Malcolm Grow Hospital, Andrews Air Force Base, Md.

Address correspondence to Mark F. Eddy, Ph.D., Dept. of Family Medicine, Wright State University School of Medicine, One Franciscan Way, Dayton, OH 45408. Reprints are not available from the authors.

**REFERENCES**


