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01 - 10.1 Obsessive Compulsive Disorder

10.1 Obsessive-Compulsive Disorder

Obsessive-Compulsive and Related Disorders 10.1 Obsessive-Compulsive Disorder Obsessive-compulsive disorder (OCD) is represented by a diverse group of symptoms that include intrusive thoughts, rituals, preoccupations, and compulsions. These recurrent obsessions or compulsions cause severe distress to the person. The obsessions or compulsions are time-consuming and interfere significantly with the person's normal routine, occupational functioning, usual social activities, or relationships. A patient with OCD may have an obsession, a compulsion, or both. An obsession is a recurrent and intrusive thought, feeling, idea, or sensation. In contrast to an obsession, which is a mental event, a compulsion is a behavior. Specifically, a compulsion is a conscious, standardized, recurrent behavior, such as counting, checking, or avoiding. A patient with OCD realizes the irrationality of the obsession and experiences both the obsession and the compulsion as ego-dystonic (i.e., unwanted behavior). Although the compulsive act may be carried out in an attempt to reduce the anxiety associated with the obsession, it does not always succeed in doing so. The completion of the compulsive act may not affect the anxiety, and it may even increase the anxiety. Anxiety is also increased when a person resists carrying out a compulsion. A variety of OCD conditions are described in this section and those that follow (Sections 10.2-10.5).

EPIDEMIOLOGY The rates of OCD are fairly consistent, with a lifetime prevalence in the general population estimated at 2 to 3 percent. Some researchers have estimated that the disorder is found in as many as 10 percent of outpatients in psychiatric clinics. These figures make OCD the fourth most common psychiatric diagnosis after phobias, substance-related disorders, and major depressive disorder. Epidemiological studies in Europe, Asia, and Africa have confirmed these rates across cultural boundaries. Among adults, men and women are equally likely to be affected, but among adolescents, boys are more commonly affected than girls. The mean age of onset is about 20 years, although men have a slightly earlier age of onset (mean about 19 years) than women (mean about 22 years). Overall, the symptoms of about two thirds of affected persons have an onset before age 25, and the symptoms of fewer than 15 percent have an onset after age 35. The onset of the disorder can occur in adolescence

or childhood, in some cases as early as 2 years of age. Single persons are more frequently affected with OCD than are married persons, although this finding probably reflects the difficulty that

persons with the disorder have maintaining a relationship. OCD occurs less often among blacks than among whites, although access to health care rather than differences in prevalence may explain the variation. COMORBIDITY Persons with OCD are commonly affected by other mental disorders. The lifetime prevalence for major depressive disorder in persons with OCD is about 67 percent and for social phobia about 25 percent. Other common comorbid psychiatric diagnoses in patients with OCD include alcohol use disorders, generalized anxiety disorder, specific phobia, panic disorder, eating disorders, and personality disorders. OCD exhibits a superficial resemblance to obsessive-compulsive personality disorder, which is associated with an obsessive concern for details, perfectionism, and other similar personality traits. The incidence of Tourette's disorder in patients with OCD is 5 to 7 percent, and 20 to 30 percent of patients with OCD have a history of tics. ETIOLOGY Biological Factors Neurotransmitters SEROTONERGIC SYSTEM. The many clinical drug trials that have been conducted support the hypothesis that dysregulation of serotonin is involved in the symptom formation of obsessions and compulsions in the disorder. Data show that serotonergic drugs are more effective in treating OCD than drugs that affect other neurotransmitter systems, but whether serotonin is involved in the cause of OCD is not clear. Clinical studies have assayed cerebrospinal fluid (CSF) concentrations of serotonin metabolites (e.g., 5hydroxyindoleacetic acid [5-HIAA]) and affinities and numbers of platelet-binding sites of tritiated imipramine (Tofranil), which binds to serotonin reuptake sites, and have reported variable findings of these measures in patients with OCD. In one study, the CSF concentration of 5-HIAA decreased after treatment with clomipramine (Anafranil), focusing attention on the serotonergic system. NORADRENERGIC SYSTEM. Currently, less evidence exists for dysfunction in the noradrenergic system in OCD. Anecdotal reports show some improvement in OCD symptoms with use of oral clonidine (Catapres), a drug that lowers the amount of norepinephrine released from the presynaptic nerve terminals. NEUROIMMUNOLOGY. Some interest exists in a positive link between streptococcal infection and OCD. Group A β -hemolytic streptococcal infection can cause rheumatic fever, and approximately 10 to 30 percent of the patients develop Sydenham's chorea and show obsessive-compulsive symptoms.

Brain-Imaging Studies. Neuroimaging in patients with OCD has produced converging data implicating altered function in the neurocircuitry between orbitofrontal cortex, caudate, and thalamus. Various functional brain-imaging studies—for example, positron emission tomography (PET)—have shown increased activity (e.g., metabolism and blood flow) in the frontal lobes, the basal ganglia (especially the caudate), and the cingulum of patients with OCD. The involvement of these areas in the pathology of OCD appears more associated with corticostriatal pathways than with the amygdala pathways, which are the current focus of much anxiety disorder research. Pharmacological and behavioral treatments reportedly reverse these abnormalities (Fig. 10.1-1). Data from functional brain-imaging studies are consistent with data from structural brain-imaging studies. Both computed tomographic (CT) and magnetic resonance imaging (MRI) studies have found bilaterally smaller caudates in patients with OCD. Both functional and structural brain-imaging study results are also compatible with the observation that neurological procedures involving the cingulum are sometimes effective in the treatment of OCD. One recent MRI study reported increased T1 relaxation times in the frontal cortex, a finding consistent with the location of abnormalities discovered in PET studies. FIGURE 10.1-1 Brain regions implicated in the pathophysiology of obsessive-compulsive disorder. (From

Rosenberg DR, MacMillan SN, Moore GJ. Brain anatomy and chemistry may predict treatment response in paediatric obsessive-compulsive disorder. In *J Neuropsychopharmacol*. 2001; 4:179, with permission.) Genetics. Available genetic data on OCD support the hypothesis that the disorder has a significant genetic component. Relatives of probands with OCD consistently have a threefold to fivefold higher probability of having OCD or obsessive-compulsive features than families of control probands. The data, however, do not yet distinguish the heritable factors from the influence of cultural and behavioral effects on the transmission of the disorder. Studies of concordance for the disorder in twins have consistently found a significantly higher concordance rate for monozygotic twins than for dizygotic twins. Some studies also demonstrate increased rates of a variety of conditions among relatives of OCD probands, including generalized anxiety disorder, tic disorders, body dysmorphic disorder, hypochondriasis, eating disorders, and habits such as nail-biting. Other Biological Data. Electrophysiological studies, sleep electroencephalogram (EEG) studies, and neuroendocrine studies have contributed data that indicate some commonalities between depressive disorders and OCD. A higher than usual incidence of nonspecific EEG abnormalities occurs in patients with OCD. Sleep EEG studies have found abnormalities similar to those in depressive disorders, such as decreased rapid eye movement latency. Neuroendocrine studies have also produced some analogies to depressive disorders, such as nonsuppression on the dexamethasone-suppression test in about one-third of patients and decreased growth hormone secretion with clonidine infusions. As mentioned, studies have suggested a possible link between a subset of OCD cases and certain types of motor tic syndromes (i.e., Tourette's disorder and chronic motor tics). A higher rate of OCD, Tourette's disorder, and chronic motor tics are found in relatives of patients with Tourette's disorder than in relatives of controls, whether or not they had OCD. Most family studies of probands with OCD have found increased rates of Tourette's disorder and chronic motor tics only among the relatives of probands with OCD who also have some form of tic disorder. Evidence also suggests cotransmission of Tourette's disorder, OCD, and chronic motor tics within families. Behavioral Factors According to learning theorists, obsessions are conditioned stimuli. A relatively neutral stimulus becomes associated with fear or anxiety through a process of respondent conditioning by being paired with events that are noxious or anxiety producing. Thus, previously neutral objects and thoughts become conditioned stimuli capable of provoking anxiety or discomfort. Compulsions are established in a different way. When a person discovers that a certain action reduces anxiety attached to an obsessional thought, he or she develops

active avoidance strategies in the form of compulsions or ritualistic behaviors to control the anxiety. Gradually, because of their efficacy in reducing a painful secondary drive (anxiety), the avoidance strategies become fixed as learned patterns of compulsive behaviors. Learning theory provides useful concepts for explaining certain aspects of obsessive-compulsive phenomena—for example, the anxiety-provoking capacity of ideas not necessarily frightening in themselves and the establishment of compulsive patterns of behavior. Psychosocial Factors Personality Factors. OCD differs from obsessive-compulsive personality disorder, which is associated with an obsessive concern for details, perfectionism, and other similar personality traits. Most persons with OCD do not have premorbid compulsive symptoms, and such personality traits are neither necessary nor sufficient for the development of OCD. Only about 15 to 35 percent of patients with OCD have had premorbid obsessional traits. Psychodynamic Factors. Psychodynamic insight may be of great help in understanding problems with treatment compliance, interpersonal difficulties, and personality problems accompanying the Axis I disorder. Many patients with OCD may refuse to cooperate with effective treatments such as selective serotonin reuptake inhibitors (SSRIs) and behavior therapy.

Even though the symptoms of OCD may be biologically driven, psychodynamic meanings may be attached to them. Patients may become invested in maintaining the symptomatology because of secondary gains. For example, a male patient, whose mother stays home to take care of him, may unconsciously wish to hang on to his OCD symptoms because they keep the attention of his mother. Another contribution of psychodynamic understanding involves the interpersonal dimensions. Studies have shown that relatives will accommodate the patient through active participation in rituals or significant modifications of their daily routines. This form of family accommodation is correlated with stress in the family, rejecting attitudes toward the patient, and poor family functioning. Often, the family members are involved in an effort to reduce the patient's anxiety or to control the patient's expressions of anger. This pattern of relatedness may become internalized and be recreated when the patient enters a treatment setting. By looking at recurring patterns of interpersonal relationships from a psychodynamic perspective, patients may learn how their illness affects others. Finally, one other contribution of psychodynamic thinking is recognition of the precipitants that initiate or exacerbate symptoms. Often, interpersonal difficulties increase the patient's anxiety and, thus, increase the patient's symptomatology as well. Research suggests that OCD may be precipitated by a number of environmental stressors, especially those involving pregnancy, childbirth, or parental care of children. An understanding of the stressors may assist the clinician in an overall treatment plan

that reduces the stressful events themselves or their meaning to the patient. SIGMUND FREUD. In classic psychoanalytic theory, OCD was termed obsessive-compulsive neurosis and was considered a regression from the oedipal phase to the anal psychosexual phase of development. When patients with OCD feel threatened by anxiety about retaliation for unconscious impulses or by the loss of a significant object's love, they retreat from the oedipal position and regress to an intensely ambivalent emotional stage associated with the anal phase. The ambivalence is connected to the unraveling of the smooth fusion between sexual and aggressive drives characteristic of the oedipal phase. The coexistence of hatred and love toward the same person leaves patients paralyzed with doubt and indecision. An example of how Freud viewed OCD symptoms is described by Otto Fenichel in the case study presented here. A patient, who was not analyzed, complained in the first interview that he suffered from the compulsion to look backward constantly, from fear that he might have overlooked something important behind him. These ideas were predominant; he might overlook a coin lying on the ground; he might have injured an insect by stepping on it; or an insect might have fallen on its back and need his help. The patient was also afraid of touching anything, and whenever he had touched an object he had to convince himself that he had not destroyed it. He had no vocation because the severe compulsions disturbed all his working activity; however, he had one passion: housecleaning. He liked to visit his neighbors and clean their houses, just for fun. Another symptom was described by the patient as his "clothes consciousness"; he was constantly preoccupied with the question whether or not his suit fitted. He, too, stated that sexuality did not play an important part in his life. He had sexual intercourse two or three times a year only, and exclusively with girls in whom he had no personal interest. Later on, he mentioned another symptom. As a child, he had felt his mother to be disgusting and had been terribly afraid of touching her. There was no real reason whatsoever for such a disgust, for the mother had been a nice person. In the clinical picture for this case study, Freud believed the need to be clean and not to touch is related to anal sexuality, and the disgust for the mother is a reaction against incestuous fears. One of the striking features of patients with OCD is the degree to which they are preoccupied with aggression or cleanliness, either overtly in the content of their symptoms or in the

associations that lie behind them. The psychogenesis of OCD, therefore, may lie in disturbances in normal growth and development related to the anal-sadistic phase of development. Ambivalence. Ambivalence is an important feature of normal children during the analsadistic developmental phase; children feel both love and murderous hate toward the same object, sometimes simultaneously. Patients with OCD often consciously experience

both love and hate toward an object. This conflict of opposing emotions is evident in a patient's doing and undoing patterns of behavior and in paralyzing doubt in the face of choices. Magical Thinking. In magical thinking, regression uncovers early modes of thought rather than impulses; that is, ego functions as well as id functions are affected by regression. Inherent in magical thinking is omnipotence of thought. Persons believe that merely by thinking about an event in the external world they can cause the event to occur without intermediate physical actions. This feeling causes them to fear having an aggressive thought (Fig. 10.1-2). FIGURE 10.1-2 In magical thinking, one believes that the thought is equal to the deed, that wishing a person dead will make it happen, as symbolized in this illustration. (Courtesy of Arthur Tress.) DIAGNOSIS AND CLINICAL FEATURES As part of the diagnostic criteria for OCD, the fifth edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-5) allows clinicians to indicate whether the patient's OCD is characterized by good or fair insight, poor insight, or absent insight (Table 10.11). Patients with good or fair insight recognize that their OCD beliefs are definitely or probably not true or may or may not be true. Patients with poor insight believe their OCD beliefs are probably true, and patients with absent insight are convinced that their

beliefs are true. Table 10.1-1 DSM-5 Diagnostic Criteria for Obsessive-Compulsive Disorder Patients with OCD often take their complaints to physicians rather than psychiatrists (Table 10.1-2). Most patients with OCD have both obsessions and compulsions—up to 75 percent in some surveys. Some researchers and clinicians believe that the number may be much closer to 100 percent if patients are carefully assessed for the presence of mental compulsions in addition to behavioral compulsions. For example, an obsession about hurting a child may be followed by a mental compulsion to repeat a specific prayer a specific number of times. Other researchers and clinicians, however, believe that some patients do have only obsessive thoughts without compulsions. Such patients are likely to have repetitious thoughts of a sexual or aggressive act that is reprehensible to them. For clarity, it is best to conceptualize obsessions as thoughts and compulsions as behavior. Table 10.1-2 Nonpsychiatric Clinical Specialists Likely to See Obsessive-Compulsive Disorder Patients

Obsessions and compulsions are the essential features of OCD. An idea or an impulse intrudes itself insistently and persistently into a person's conscious awareness. Typical obsessions associated with OCD include thoughts about contamination ("My hands are dirty") or doubts ("I forgot to turn off the stove"). A feeling of anxious dread accompanies the central manifestation, and the key characteristic of a compulsion is that it reduces the anxiety associated with the obsession. The obsession or the compulsion is ego-alien; that is, it is experienced as foreign to the person's experience of himself or herself as a psychological being. No matter how vivid and compelling the obsession or compulsion, the person usually recognizes it as absurd and irrational. The person suffering from obsessions and compulsions usually feels a strong desire to resist them. Nevertheless, about half of all patients offer little resistance to compulsions, although about 80 percent of all patients believe that the compulsion is irrational. Sometimes, patients overvalue

obsessions and compulsions—for example, they may insist that compulsive cleanliness is morally correct, even though they have lost their jobs because of time spent cleaning. Symptom Patterns The presentation of obsessions and compulsions is heterogeneous in adults (Table 10.13) and in children and adolescents (Table 10.1-4). The symptoms of an individual patient can overlap and change with time, but OCD has four major symptom patterns.

Table 10.1-3 Obsessive-Compulsive Symptoms in Adults Table 10.1-4 Reported Obsessions and Compulsions for 70 Consecutive Child and Adolescent Patients

Contamination. The most common pattern is an obsession of contamination, followed by washing or accompanied by compulsive avoidance of the presumably contaminated object. The feared object is often hard to avoid (e.g., feces, urine, dust, or germs). Patients may literally rub the skin off their hands by excessive hand washing or may be unable to leave their homes because of fear of germs. Although anxiety is the most common emotional response to the feared object, obsessive shame and disgust are also common. Patients with contamination obsessions usually believe that the

contamination is spread from object to object or person to person by the slightest contact.

Pathological Doubt. The second most common pattern is an obsession of doubt, followed by a compulsion of checking. The obsession often implies some danger of violence (e.g., forgetting to turn off the stove or not locking a door). The checking may involve multiple trips back into the house to check the stove, for example. These patients have an obsessional self-doubt and always feel guilty about having forgotten or committed something. Intrusive Thoughts. In the third most common pattern, there are intrusive obsessional thoughts without a compulsion. Such obsessions are usually repetitious thoughts of a sexual or aggressive act that is reprehensible to the patient.

Patients obsessed with thoughts of aggressive or sexual acts may report themselves to police or confess to a priest. Suicidal ideation may also be obsessive; but a careful suicidal assessment of actual risk must always be done. Symmetry. The fourth most common pattern is the need for symmetry or precision, which can lead to a compulsion of slowness. Patients can literally take hours to eat a meal or shave their faces. Other Symptom Patterns. Religious obsessions and compulsive hoarding are common in patients with OCD. Compulsive hair pulling and nail biting are behavioral patterns related to OCD. Masturbation may also be compulsive. Mental Status

Examination On mental status examinations, patients with OCD may show symptoms of depressive disorders. Such symptoms are present in about 50 percent of all patients. Some patients with OCD have character traits suggesting obsessive-compulsive personality disorder (e.g., excessive need for preciseness and neatness), but most do not. Patients with OCD, especially men, have a higher than average celibacy rate. Married patients have a greater than usual amount of marital discord.

Ms. K was referred for psychiatric evaluation by her general practitioner. On interview, Ms. K described a long history of checking rituals that had caused her to lose several jobs and had damaged numerous relationships. She reported, for example, that because she often had the thought that she had not locked the door to the car, it was difficult for her to leave that car until she had checked repeatedly that it was secure. She had broken several car door handles with the vigor of her checking and had been up to an hour late to work because she spent so much time checking her car door. Similarly, she had recurrent thoughts that she had left the door to her apartment unlocked, and she returned several times daily to check her door before she left for

work. She reported that checking doors decreased her anxiety about security. Although Ms. K reported that she had occasionally tried to leave her car or apartment without checking the door (e.g., when she was already late for work), she found that she became so worried about her car being stolen or her apartment being broken into that she had difficulty going anywhere. Ms. K reported that her obsessions about security had become so extreme over the past 3 months that she had lost her job due to recurrent tardiness. She recognized the irrational nature of her obsessive concerns but could not bring herself to ignore them. (Courtesy of Erin B. McClure-Tone, Ph.D., and Daniel S. Pine, M.D.)

DIFFERENTIAL DIAGNOSIS

Medical Conditions A number of primary medical disorders can produce syndromes bearing a striking resemblance to OCD. The current conceptualization of OCD as a disorder of the basal ganglia derives from the phenomenological similarity between idiopathic OCD and OCD-like disorders that are associated with basal ganglia diseases, such as Sydenham's chorea and Huntington's disease. Neurological signs of such basal ganglia pathology must be assessed when considering the diagnosis of OCD in a patient presenting for psychiatric treatment. It should also be noted that OCD frequently develops before age 30 years, and new-onset OCD in an older individual should raise questions about potential neurological contributions to the disorder. Tourette's Disorder OCD is closely related to Tourette's disorder, as the two conditions frequently co-occur, both in individuals over time and within families. About 90 percent of persons with Tourette's disorder have compulsive symptoms, and as many as two thirds meet the diagnostic criteria for OCD. In its classic form, Tourette's disorder is associated with a pattern of recurrent vocal and motor tics that bears only a slight resemblance to OCD. The premonitory urges that precede tics often strikingly resemble obsessions, however, and many of the more complicated motor tics are very similar to compulsions.

Other Psychiatric Conditions

Obsessive-compulsive behavior is found in a host of other psychiatric disorders, and the clinician must also rule out these conditions when diagnosing OCD. OCD exhibits a superficial resemblance to obsessive-compulsive personality disorder, which is associated with an obsessive concern for details, perfectionism, and other similar personality traits. The conditions are easily distinguished in that only OCD is associated with a true syndrome of obsessions and compulsions. Psychotic symptoms often lead to obsessive thoughts and compulsive behaviors that

can be difficult to distinguish from OCD with poor insight, in which obsessions border on psychosis. The keys to distinguishing OCD from psychosis are (1) patients with OCD can almost always acknowledge the unreasonable nature of their symptoms, and (2) psychotic illnesses are typically associated with a host of other features that are not characteristic of OCD. Similarly, OCD can be difficult to differentiate from depression because the two disorders often occur comorbidly, and major depression is often associated with obsessive thoughts that, at times, border on true obsessions such as those that characterize OCD. The two conditions are best distinguished by their courses. Obsessive symptoms associated with depression are only found in the presence of a depressive episode, whereas true OCD persists despite remission of depression.

COURSE AND PROGNOSIS

More than half of patients with OCD have a sudden onset of symptoms. The onset of symptoms for about 50 to 70 percent of patients occurs after a stressful event, such as a pregnancy, a sexual problem, or the death of a relative. Because many persons manage to keep their symptoms secret, they often delay 5 to 10 years before coming to psychiatric attention, although the delay is probably shortening with increased awareness of the disorder. The course is usually long but variable; some patients experience a fluctuating course, and others experience a constant one. About 20 to 30 percent of patients have significant improvement in their symptoms, and 40 to 50 percent have moderate improvement. The remaining 20 to 40 percent of patients

either remain ill or their symptoms worsen. About one-third of patients with OCD have major depressive disorder, and suicide is a risk for all patients with OCD. A poor prognosis is indicated by yielding to (rather than resisting) compulsions, childhood onset, bizarre compulsions, the need for hospitalization, a coexisting major depressive disorder, delusional beliefs, the presence of overvalued ideas (i.e., some acceptance of obsessions and compulsions), and the presence of a personality disorder (especially schizotypal personality disorder). A good prognosis is indicated by good social and occupational adjustment, the presence of a precipitating event, and an episodic nature of the symptoms. The obsessional content does not seem to be related to the prognosis.

TREATMENT With mounting evidence that OCD is largely determined by biological factors, classic psychoanalytic theory has fallen out of favor. Moreover, because OCD symptoms appear to be largely refractory to psychodynamic psychotherapy and psychoanalysis, pharmacological and behavioral treatments have become common. But psychodynamic factors may be of considerable benefit in understanding what precipitates exacerbations of the disorder and in treating various forms of resistance to treatment, such as noncompliance with medication. Many patients with OCD tenaciously resist treatment efforts. They may refuse to take medication and may resist carrying out therapeutic homework assignments and other

activities prescribed by behavior therapists. The obsessive-compulsive symptoms themselves, no matter how biologically based, may have important psychological meanings that make patients reluctant to give them up. Psychodynamic exploration of a patient's resistance to treatment may improve compliance. Well-controlled studies have found that pharmacotherapy, behavior therapy, or a combination of both is effective in significantly reducing the symptoms of patients with OCD. The decision about which therapy to use is based on the clinician's judgment and experience and the patient's acceptance of the various modalities.

Pharmacotherapy The efficacy of pharmacotherapy in OCD has been proved in many clinical trials and is enhanced by the observation that the studies find a placebo response rate of only about 5 percent. The drugs, some of which are used to treat depressive disorders or other mental disorders, can be given in their usual dosage ranges. Initial effects are generally seen after 4 to 6 weeks of treatment, although 8 to 16 weeks are usually needed to obtain maximal therapeutic benefit. Treatment with antidepressant drugs is still controversial, and a significant proportion of patients with OCD who respond to treatment with antidepressant drugs seem to relapse if the drug therapy is discontinued. The standard approach is to start treatment with an SSRI or clomipramine and then move to other pharmacological strategies if the serotonin-specific drugs are not effective. The serotonergic drugs have increased the percentage of patients with OCD who are likely to respond to treatment to the range of 50 to 70 percent.

Selective Serotonin Reuptake Inhibitors. Each of the SSRIs available in the United States—fluoxetine (Prozac), fluvoxamine (Luvox), paroxetine (Paxil), sertraline (Zoloft), citalopram (Celexa)—has been approved by the US Food and Drug Administration (FDA) for the treatment of OCD. Higher dosages have often been necessary for a beneficial effect, such as 80 mg a day of fluoxetine. Although the SSRIs can cause sleep disturbance, nausea and diarrhea, headache, anxiety, and restlessness, these adverse effects are often transient and are generally less troubling than the adverse effects associated with tricyclic drugs, such as clomipramine. The best clinical outcomes occur when SSRIs are used in combination with behavioral therapy.

Clomipramine. Of all the tricyclic and tetracyclic drugs, clomipramine is the most selective for serotonin reuptake versus norepinephrine reuptake and is exceeded in this respect only by the SSRIs. The potency of serotonin reuptake of clomipramine is exceeded only by sertraline and paroxetine. Clomipramine was the first drug to be FDA approved for the treatment of

OCD. Its dosing must be titrated upward over 2 to 3 weeks to avoid gastrointestinal adverse effects and orthostatic hypotension, and as with other tricyclic drugs, it causes significant sedation and anticholinergic effects, including dry mouth and constipation. As with SSRIs, the best outcomes result from a combination

of drug and behavioral therapy. Other Drugs. If treatment with clomipramine or an SSRI is unsuccessful, many therapists augment the first drug by the addition of valproate (Depakene), lithium (Eskalith), or carbamazepine (Tegretol). Other drugs that can be tried in the treatment of OCD are venlafaxine (Effexor), pindolol (Visken), and the monoamine oxidase inhibitors (MAOIs), especially phenelzine (Nardil). Other pharmacological agents for the treatment of unresponsive patients include buspirone (BuSpar), 5-hydroxytryptamine (5HT), L-tryptophan, and clonazepam (Klonopin). Adding an atypical antipsychotic such as risperidone (Risperdal) has helped in some cases. Behavior Therapy Although few head-to-head comparisons have been made, behavior therapy is as effective as pharmacotherapies in OCD, and some data indicate that the beneficial effects are longer lasting with behavior therapy. Many clinicians, therefore, consider behavior therapy the treatment of choice for OCD. Behavior therapy can be conducted in both outpatient and inpatient settings. The principal behavioral approaches in OCD are exposure and response prevention. Desensitization, thought stopping, flooding, implosion therapy, and aversive conditioning have also been used in patients with OCD. In behavior therapy, patients must be truly committed to improvement. Psychotherapy In the absence of adequate studies of insight-oriented psychotherapy for OCD, any valid generalizations about its effectiveness are hard to make, although there are anecdotal reports of successes. Individual analysts have seen striking and lasting changes for the better in patients with obsessive-compulsive personality disorder, especially when they are able to come to terms with the aggressive impulses underlying their character traits. Likewise, analysts and dynamically oriented psychiatrists have observed marked symptomatic improvement in patients with OCD in the course of analysis or prolonged insight psychotherapy. Mr. P, a passive, emotionally vacant, exceedingly polite and quiet man in his 30s, had obsessive-compulsive disorder and sought psychodynamic psychotherapy because he was having difficulty functioning at work or in relationships. Mr. P had counting rituals and a compulsion to keep checking that there were no sharp knives left with their blades exposed and no shoes not properly hung on shoetrees or aligned in closets. In sessions he often spoke endlessly about seemingly empty details of his work life. The therapist became drowsy at one point as he listened to Mr. P, who noticed this and, with uncharacteristic affect in his voice, asked, "Doctor, excuse me, but are you listening?" To this the therapist replied, "No, I guess not. Are you?" Mr. P apologized for having been boring.

This incident led to a direct discussion between them about the way Mr. P's obsessive, circumstantial, and emotionally empty recounting of details was a form of resistance and one in which his therapist had joined him by becoming drowsy in the session. Were they going to do the work of therapy together or not? In subsequent sessions Mr. P made efforts to speak more about the origin of his symptoms, which began with a ritual of kissing his parents each goodnight nine times lest he be unable to sleep. On one occasion, while explaining this, Mr. P made a slip of speech about having to kiss his father nine times, instead substituting the word "kick" for "kiss." When he heard this, the therapist asked Mr. P if he had noticed the slip. Mr. P insisted he could not have made such a mistake, escalated his protests about this for a minute or two as he became sadder, then burst into sobs. While weeping Mr. P accused the therapist of pretending there had

been a slip of speech to make him look bad, and then, with an outburst of anger, recalled the hurt and injury he had felt when the therapist had become drowsy in the session. Surprised at the intensity of his feelings, Mr. P recalled when his need to kiss his parents goodnight in a ritualized way had begun. It was after he had gotten a new puppy. His controlling and intrusive father had kicked Mr. P's beloved new puppy after the latter had a series of toileting accidents in the house. Mr. P wept as he recalled his revulsion and rage at his father and the way he had later comforted his dog when alone. Mr. P recalled having repeatedly unfolded and refolded the blade of his jackknife to show his dog his weapon and swore to his dog that he would use it on his father if the latter ever tried to hurt him again. Soon after the kicking incident Mr. P's father decided he had had enough of this messy puppy and sent the dog away while Mr. P was at school. Mr. P was bereft for a while, but soon settled into an affectless, timid, and passive way of being. Mr. P responded to what he had learned about his compulsions by actively trying to suppress them and became more anxious. As his anxiety was explored, memories emerged of Mr. P's earlier struggle with his parents around toileting before the puppy came into his life, when he had received regular enemas from his father to control the frequency of bowel movements. Despite loving his father, Mr. P was also enraged at him for taking his dog away without a chance to say goodbye and for the intrusive and terrifying experience of the enemas, while he was also furious at his mother for not stopping his father. Mr. P also felt humiliated that he had experienced this kind of intrusion into his body and that he had let his dog be given away by his father after swearing that he would protect the puppy from his father. The meaning of Mr. P's specific rituals about knives and shoes became apparent in the course of his therapy as a result of his reaction to his therapist's lapse in becoming drowsy and a slip of speech that revealed aggression hidden beneath passivity and compliance. Mr. P needed to be sure that no knife blades were exposed because such blades represented the threat of a terrifying assault on his father or an equally terrifying failure to protect the puppy that he loved but lost. Similarly, Mr. P's compulsive need to put shoes properly and safely on shoetrees was linked to an effort to put away the memory of and prevent any recurrence of his beloved puppy being

kicked and injured by a shod foot. After these were clarified and Mr. P tried to control his rituals, signal anxiety emerged, and with it the recovery of memories of an earlier struggle with his parents about intrusive control of his toileting behavior. (Courtesy of E. M. Plakun, M.D.) Supportive psychotherapy undoubtedly has its place, especially for those patients with OCD who, despite symptoms of varying degrees of severity, are able to work and make social adjustments. With continuous and regular contact with an interested, sympathetic, and encouraging professional person, patients may be able to function by virtue of this help, without which their symptoms would incapacitate them. Occasionally, when obsessional rituals and anxiety reach an intolerable intensity, it is necessary to hospitalize patients until the shelter of an institution and the removal from external environmental stresses diminish symptoms to a tolerable level. A patient's family members are often driven to the verge of despair by the patient's behavior. Any psychotherapeutic endeavors must include attention to the family members through provision of emotional support, reassurance, explanation, and advice on how to manage and respond to the patient. Other Therapies Family therapy is often useful in supporting the family, helping reduce marital discord resulting from the disorder, and building a treatment alliance with the family members for the good of the patient. Group therapy is useful as a support system for some patients. For extreme cases that are treatment resistant and chronically debilitating, electroconvulsive therapy (ECT) and psychosurgery are considerations. ECT should be tried before surgery. A psychosurgical procedure for OCD is cingulotomy, which may be successful in treating otherwise severe and treatment-

unresponsive patients. Other surgical procedures (e.g., subcaudate tractotomy, also known as capsulotomy) have also been used for this purpose. Deep Brain Stimulation (DBS) Nonablative surgical techniques involving indwelling electrodes in various basal ganglia nuclei are under investigation to treat both OCD and Tourette's disorder. DBS is performed using MRI-guided stereotactic techniques in which electrodes are implanted in the brain. Complications of DBS include infection, bleeding, or the development of seizures, which are almost always controlled by treatment with phenytoin (Dilantin). Some patients who do not respond to psychosurgery alone and who do not respond to pharmacotherapy or behavior therapy before the operation do respond to pharmacotherapy or behavior therapy after psychosurgery.

OBSESSIVE-COMPULSIVE OR RELATED DISORDER DUE TO ANOTHER MEDICAL CONDITION

Many medical condition can result in obsessive-compulsive symptoms (i.e., hair pulling, skin-picking). The diagnosis of obsessive-compulsive or related disorder attributable to another medical condition is used when obsessive-compulsive symptoms develop in the context of an identifiable medical condition. OCD-like symptoms have been reported in children following group A β -hemolytic streptococcal infection and have been called pediatric autoimmune neuropsychiatric disorders associated with streptococcus (PANDAS). They are believed to result from an autoimmune process that leads to inflammation of the basal ganglia that disrupts cortical-striatal-thalamic axis functioning. For more information, see Section 31.14 OCD in childhood and adolescence.

SUBSTANCE-INDUCED OBSESSIVE-COMPULSIVE OR RELATED DISORDER Substance-induced obsessive-compulsive or related disorder is characterized by the emergence of obsessive-compulsive or related symptoms as a result of a substance, including drugs, medications, and alcohol. Symptoms present either during use or within a month after substance use, intoxication, or withdrawal. The symptoms cannot be better accounted for by a specific obsessive-compulsive or related disorder or another medical condition. The disturbance cannot occur exclusively during the course of delirium.

OTHER SPECIFIED OBSESSIVE-COMPULSIVE OR RELATED DISORDER This category is for patients who have symptoms characteristic of obsessive-compulsive and related disorder but do not meet the full criteria for any specific obsessive-compulsive or related disorder. This diagnosis is appropriate under three situations: (1) an atypical presentation, (2) another specific syndrome not listed in DSM-5, and (3) the information presented is insufficient to make a full diagnosis of a obsessive-compulsive or related disorder.

Olfactory Reference Syndrome Olfactory reference syndrome is characterized by a false belief by the patient that he or she has a foul body odor that is not perceived by others. The preoccupation leads to repetitive behaviors such as washing the body or changing clothes. The patient may have good, fair, poor, or absent insight into the behavior. The syndrome is predominant in males and single status. The mean age of onset is 25 years of age. The belief of a subjective sense of smell that does not exist externally may rise to the level of a somatic delusion, in which case a diagnosis of delusional disorder should be considered. The syndrome has been well documented in the psychiatric literature, usually classified as a delusion of perception. Whether or not it deserves a special diagnostic category is open to question. In assessing a patient with olfactory reference syndrome, it is important to exclude somatic causes. Some patients with temporal lobe epilepsy may complain of smelling foul odors. Local irritations of the hippocampus from pituitary tumors may also cause

olfactory sensations. Patients with inflammation of the frontal, ethmoidal, or sphenoidal sinuses may also have a subjective sense of offensive odors. Olfactory reference syndrome is included in the "other specified" designation for obsessive-compulsive and related disorder of DSM-5.

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02 - 10.2 Body Dysmorphic Disorder

10.2 Body Dysmorphic Disorder

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10.2 Body Dysmorphic Disorder Body dysmorphic disorder is characterized by a preoccupation with an imagined defect in appearance that causes clinically significant distress or impairment in important areas of functioning. If a slight physical anomaly is actually present, the person's concern with the anomaly is excessive and bothersome. The disorder was recognized and named dysmorphophobia more than 100 years ago by Emil Kraepelin, who considered it a compulsive neurosis; Pierre Janet called it *obsession de la honte du corps* (obsession with shame of the body). Freud wrote about the condition in his description of the Wolf-Man, who was excessively concerned about his nose. Although dysmorphophobia was widely recognized and studied in Europe, it was not until the publication of the third edition of the *Diagnostic and Statistical Manual of Mental Disorders (DSM-III)* in 1980 that dysmorphophobia, as an example of a typical somatoform disorder, was specifically mentioned in the US diagnostic criteria. In the fourth text revision of DSM (*DSMIV-TR*), the condition was known as body dysmorphic disorder, because the DSM editors believed that the term dysmorphophobia inaccurately implied the presence of a behavioral pattern of phobic avoidance. In the fifth edition of DSM (*DSM-5*), body dysmorphic disorder is included in the obsessive-compulsive spectrum disorders due to its similarities to obsessive-compulsive disorder (OCD).

EPIDEMIOLOGY Body dysmorphic disorder is a poorly studied condition, partly because patients are more likely to go to dermatologists, internists, or plastic surgeons than to psychiatrists for this condition. One study of a group of college students found that more than 50 percent had at least some preoccupation with a particular aspect of their appearance, and in about 25 percent of the students, the concern had at least some significant effect on their feelings and functioning. *DSM-5* reports a point prevalence in the United States of 2.4 percent. Available data indicate that the most common age of onset is between 15 and 30 years and that women are affected somewhat more often than men. Affected patients are also likely to be unmarried. Body dysmorphic disorder commonly coexists with other mental disorders. One study found that more than 90 percent of patients with body dysmorphic

disorder had experienced a major depressive episode in their lifetimes; about 70 percent had experienced an anxiety disorder; and about 30 percent had experienced a psychotic disorder.

ETIOLOGY The cause of body dysmorphic disorder is unknown. The high comorbidity with

depressive disorders, a higher-than-expected family history of mood disorders and OCD, and the reported responsiveness of the condition to serotonin-specific drugs indicate that, in at least some patients, the pathophysiology of the disorder may involve serotonin and may be related to other mental disorders. Stereotyped concepts of beauty emphasized in certain families and within the culture at large may significantly affect patients with body dysmorphic disorder. In psychodynamic models, body dysmorphic disorder is seen as reflecting the displacement of a sexual or emotional conflict onto a nonrelated body part. Such an association occurs through the defense mechanisms of repression, dissociation, distortion, symbolization, and projection. **DIAGNOSIS** The DSM-5 diagnostic criteria for body dysmorphic disorder stipulate preoccupation with a perceived defect in appearance or overemphasis of a slight defect. It also stipulates that at some point during the course of the disorder, the patient performs compulsive behaviors (i.e., mirror checking, excessive grooming) or mental acts (e.g., comparing their appearance to that of others). The preoccupation causes patients significant emotional distress or markedly impairs their ability to function in important areas. **CLINICAL FEATURES** The most common concerns (Table 10.2-1) involve facial flaws, particularly those involving specific parts (e.g., the nose). Sometimes the concern is vague and difficult to understand, such as extreme concern over a “scrunchy” chin. One study found that, on average, patients had concerns about four body regions during the course of the disorder. Other body parts of concern are hair, breasts, and genitalia. A proposed variant of dysmorphic disorder among men is the desire to “bulk up” and develop large muscle mass, which can interfere with ordinary living, holding a job, or staying healthy. The specific body part may change during the time a patient is affected with the disorder. Common associated symptoms include ideas or frank delusions of reference (usually about persons’ noticing the alleged body flaw), either excessive mirror checking or avoidance of reflective surfaces, and attempts to hide the presumed deformity (with makeup or clothing). The effects on a person’s life can be significant; almost all affected patients avoid social and occupational exposure. As many as one-third of patients may be housebound because of worry about being ridiculed for the alleged deformities; and approximately one-fifth of patients attempt suicide. As discussed, comorbid diagnoses of depressive disorders and anxiety disorders are common, and patients may also have traits of OCD, schizoid, and narcissistic personality disorders. Table 10.2-1 Location of Imagined Defects in 30 Patients with Body Dysmorphic Disorders

Ms. R, a 28-year-old single woman, presented with the complaint that she is “ugly” and that she feels others are laughing at her because of her ugliness. In reality, Ms. R was an attractive woman. She first became preoccupied with her appearance when she was 13, when she became obsessed with her “facial defects” (e.g., her nose was too fat, her eyes were too far apart). Up until this point, Ms. R was confident, a good student, and socially active. However, her fixation on her face caused her to socially withdraw and have difficulty concentrating in school, which in turn had a negative effect on her grades. Ms. R dropped out of high school and went for her GED due to her preoccupation. She began to frequently pick at “blemishes” and hairs on her face. She frequently checked herself in mirrors and other reflectively surfaces (e.g., spoons, windows). She

found herself thinking about her defects almost all day every day. Despite reassuring comments from family and others, Ms. R could not be convinced that there was nothing wrong with her appearance.

DIFFERENTIAL DIAGNOSIS The diagnosis of body dysmorphic disorder should not be made if the excessive bodily preoccupation is better accounted for by another psychiatric disorder. Excessive bodily preoccupation is generally restricted to concerns about being fat in anorexia nervosa; to discomfort with, or a sense of wrongness about, his or her primary and secondary sex characteristics occurring in gender identity disorder; and to mood-congruent cognitions involving appearance that occur exclusively during a major depressive episode. Individuals with avoidant personality disorder or social phobia may worry about being embarrassed by imagined or real defects in appearance, but this concern is usually not prominent, persistent, distressing, or impairing. Taijin kyofusho, a diagnosis in Japan, is similar to social phobia but has some features that are more consistent with body dysmorphic disorder, such as the belief that the person has an offensive odor or body parts that are offensive to others. Although individuals with body dysmorphic disorder have obsessional preoccupations about their appearance and may have associated compulsive behaviors (e.g., mirror checking), a separate or additional diagnosis of OCD is made only when the obsessions or compulsions are not restricted to concerns about appearance and are ego-dystonic. An additional diagnosis of delusional disorder, somatic type, can be made in people with body dysmorphic disorder only if their preoccupation with the imagined defect in appearance is held with a delusional intensity. Unlike normal concerns about appearance, the preoccupation with appearance and specific imagined defects in body dysmorphic disorder and the changed behavior because of the preoccupation are excessively time-consuming and are associated with significant distress or impairment.

COURSE AND PROGNOSIS Body dysmorphic disorder usually begins during adolescence, although it may begin later after a protracted dissatisfaction with the body. Age of onset is not well understood because variably a long delay occurs between symptom onset and treatment seeking. The onset can be gradual or abrupt. The disorder usually has a long and undulating course with few symptom-free intervals. The part of the body on which concern is focused may remain the same or may change over time.

TREATMENT Treatment of patients with body dysmorphic disorder with surgical, dermatological, dental, and other medical procedures to address the alleged defects is almost invariably unsuccessful. Although tricyclic drugs, monoamine oxidase inhibitors (MAOIs), and

pimozide (Orap) have reportedly been useful in individual cases, other data indicate that serotonin-specific drugs—for example, clomipramine (Anafranil) and fluoxetine (Prozac)—reduce symptoms in at least 50 percent of patients. In any patient with a coexisting mental disorder, such as a depressive disorder or an anxiety disorder, the coexisting disorder should be treated with the appropriate pharmacotherapy and psychotherapy. How long treatment should be continued after the symptoms of body dysmorphic disorder have remitted is unknown. Augmentation of the selective serotonin reuptake inhibitor (SSRI) with clomipramine (Anafranil), buspirone (BuSpar), lithium (Eskalith), methylphenidate (Ritalin), or antipsychotics may improve the response rate.

RELATION TO PLASTIC SURGERY Few data exist about the number of patients seeking plastic surgery who have body dysmorphic disorder. One study found that only 2 percent of the patients in a plastic surgery clinic had the diagnosis, but DSM-5 reports the figure to be 7 to 8 percent. The overall percentage may be much higher, however. Surgical requests are varied: removal of facial sags, jowls, wrinkles, or puffiness; rhinoplasty; breast reduction or enhancement; and penile enlargement. Men who request penile enlargements and women who request cosmetic surgery of the labia of the vagina or the lips of the mouth often are suffering from this disorder. Commonly

associated with the belief about appearance is an unrealistic expectation of how much surgery will correct the defect. As reality sets in, the person realizes that life's problems are not solved by altering the perceived cosmetic defect. Ideally, such patients will seek out psychotherapy to understand the true nature of their neurotic feelings of inadequacy. Absent that, patients may take out their unfulfilled expectations and anger by suing their plastic surgeons— who have one of highest malpractice-suit rates of any specialty—or by developing a clinical depression.

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03 - 10.3 Hoarding Disorder

10.3 Hoarding Disorder

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10.3 Hoarding Disorder

Compulsive hoarding is a common and often disabling phenomenon associated with impairment in such functions as eating, sleeping, and grooming. Hoarding may result in health problems and poor sanitation, particularly when hoarding of animals is involved, and may lead to death from fire or falling. The disorder is characterized by acquiring and not discarding things that are deemed to be of little or no value, resulting in excessive clutter of living spaces. Hoarding was originally considered a subtype of obsessive-compulsive disorder (OCD), but is now considered to be a separate diagnostic entity. It is commonly driven by an obsessive fear of losing important items that the person believes may be of use at some point in the future, by distorted beliefs about the importance of possessions, and by extreme emotional attachment to possessions.

EPIDEMIOLOGY

Hoarding is believed to occur in approximately 2 to 5 percent of the population, although some studies have found lifetime prevalence as high as 14 percent. It occurs equally among men and women, is more common in single persons, and is associated with social anxiety, withdrawal, and dependent personality traits. Hoarding usually begins in early adolescence and persists throughout the lifespan.

COMORBIDITY

The most significant comorbidity is found between hoarding disorder and OCD, with as many as 30 percent of OCD patients showing hoarding behavior. Studies have found an association between hoarding and compulsive buying. Buying or acquiring needless things (including receiving gifts) may be a source of comfort for hoarders, many of whom find themselves with extra items for a perceived but irrational future need. Approximately half of compulsive buyers display a high level of hoarding; however, up to 20 percent of hoarders do not show signs of excessive buying.

Hoarding is associated with high rates of personality disorders in addition to OCD. These include dependent, avoidant, schizotypal, and paranoid types. Deficits in attention and executive function that occur in hoarding may resemble those seen in attention-deficit/hyperactivity disorder (ADHD). In one study, 20 percent of hoarding patients met the criteria for ADHD. This finding correlates with the fact that OCD patients with hoarding symptoms had a ten times higher rate of developing

ADHD than those without. Hoarding behaviors are relatively common among schizophrenic patients and have been noted in dementia and other neurocognitive disorders. One study found hoarding in 20 percent of dementia patients and 14 percent of brain injury patients. Onset of hoarding has been reported in cases of frontotemporal dementia and may follow surgery resulting in structural defects in prefrontal and orbitofrontal cortex. In a study of patients with focal lesions of the telencephalon, 15 percent exhibited a sudden onset of severe and persistent collecting and saving behavior. Other disorders associated with hoarding include eating disorders, depression, anxiety disorders, substance use disorders (particularly alcohol dependence), kleptomania, and compulsive gambling. Among anxiety disorders, hoarding is most associated with generalized anxiety disorder (27 percent) and social anxiety disorder (14 percent). ETIOLOGY Little is known about the etiology of hoarding disorder. Research has shown a familial aspect to hoarding disorder, with about 80 percent of hoarders reporting at least one first-degree relative with hoarding behavior. Biological research has shown a lower metabolism in the posterior cingulate cortex and the occipital cortex of hoarders, which may also account for various cognitive impairments within hoarders such as attention and decision-making deficits. One study of the molecular genetics for hoarding found a link between hoarding behavior and markers on chromosomes 4q, 5q, and 17q. Another study found that the catecholamine-O-methyltransferase (COMT) gene on chromosome 22q11.21 might contribute to the genetic susceptibility to hoarding. DIAGNOSIS Hoarding disorder is characterized by (1) the acquiring of and failure to discard a large amount of possessions that are deemed useless or of little value; (2) greatly cluttered living areas precluding normal activities; and (3) significant distress and impairment in functioning due to hoarding. The fifth edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-5) includes diagnostic specifiers that relate to insight, which may be rated poor, fair, or good. Some patients are completely unaware of the full extent of the problem and totally resistant to treatment. At times, delusional beliefs about hoarded items are present. CLINICAL FEATURES

Hoarding is driven by the fear of losing items that the patient believes will be needed later and a distorted belief about or an emotional attachment to possessions. Most hoarders do not perceive their behavior to be a problem. In fact, many perceive their behavior to be reasonable and part of their identity. Most hoarding patients accumulate possessions passively rather than intentionally, thus clutter accumulates gradually over time. Common hoarded items include newspapers, mail, magazines, old clothes, bags, books, lists, and notes. Hoarding poses risks to not only the patient, but also to those around them. Clutter accumulated from hoarding has been attributed to deaths from fire or patients being crushed by their possessions. It can also attract pest infestations that can pose a health risk both to the patient and residents around them. Many sufferers have been evicted from their home or threatened with eviction as a result of their hoarding. In severe cases, hoarding can interfere with work, social interaction, and basic activities such as eating or sleeping. The pathological nature of hoarding comes from the inability to organize possessions and keep them organized. Many hoard to avoid making decisions about discarding items. Patients with hoarding disorder also overemphasize the importance of recalling information and possessions. For example, a hoarder will keep old newspapers and magazines because they believe that if discarded the information will be forgotten and will never be retrieved again. In addition, patients believe that forgetting information will lead to serious consequences and prefer to keep possessions in sight so as not to forget them. Ms. T, a 55-year-old single woman, presented to a therapist accompanied by her adult son, who expressed concern about Ms. T's inability to "throw things away." He reported that Ms. T's home was extremely cluttered with "needless things." Whenever he attempted to help

her “organize things,” however, Ms. T would become agitated and argumentative. Ms. T confirmed her son’s complaint and reported having this difficulty for as long as she could remember, but never really viewed it as a problem. Over the past 5 years, Ms. T’s home had become increasingly cluttered to the point that it became more and more difficult to move around within it. She was able to keep the kitchen and bathroom relatively clutter free, but the rest of her home was filled with boxes and bags filled with papers, magazines, clothes, and miscellaneous gifts and trinkets. Her living room was the most affected. Her son reported no longer being able to visit his mother because it was so difficult to move around and there were very few places for them to sit comfortably. This, Ms. T admits, has been a major source of depression for her. Ms. T used to enjoy entertaining family and friends, especially on holidays, but has not had any guests over in years because she felt that her home was no longer “suitable for company.” She had made a few attempts to clean out her home, but was unable to discard most items. When asked why she was keeping them, she replied “I may need them later.”

DIFFERENTIAL DIAGNOSIS The diagnosis of hoarding disorder should not be made if the excessive acquisition and inability to discard possessions is better accounted for by another medical or psychiatric condition. Until recently, hoarding was considered to be a symptom of OCD and obsessive-compulsive personality disorder. However, there are some major differences. Hoarding disorder patients do not display some of the classic symptoms of OCD such as recurring intrusive thoughts or compulsive rituals. Unlike symptoms of OCD, symptoms of hoarding worsen with time, rituals are not fixed, and obsessions about dirt or contamination are absent. OCD patients have better insight into their condition. Symptoms are usually ego-dystonic, whereas in hoarding disorder they are ego-syntonic. Hoarding behavior is seldom repetitive and is not viewed as intrusive or distressing to the hoarder. Distress mainly comes at the prospect of discarding items, and it manifests more as guilt and anger than anxiety. Hoarding disorder also tends to be less responsive to classic treatments for OCD such as exposure therapy, cognitive-behavioral therapy (CBT), and selective serotonin reuptake inhibitors (SSRIs). Some case reports show the onset of this behavior in patients after suffering brain lesions. Hoarding associated with brain lesions is more purposeless than hoarding that is motivated by emotional attachment or high intrinsic value of possessions. It is a common symptom in moderate to severe dementia. In cases of dementia, hoarding is often associated with a higher prevalence of hiding, rummaging, repetitive behavior, pilfering, and hyperphagia. Onset of the behavior usually coincides with onset of the dementia, starting in an organized manner, and becomes more disorganized as the disease progresses. The onset of dementia in a patient who has hoarded throughout his or her lifetime can aggravate the hoarding behavior. Hoarding behavior can be associated with schizophrenia. It is mostly associated with severe cases and is seen as a repetitive behavior associated with delusions, self-neglect, and squalor. Bipolar disorder is ruled out by the absence of severe mood swings.

COURSE AND PROGNOSIS The disorder is a chronic condition with a treatment-resistant course. Treatment seeking does not usually occur until patients are in their 40s or 50s, even if the hoarding began during adolescence. Symptoms may fluctuate throughout the course of the disorder, but full remission is rare. Patients have very little insight into their behavior and usually seek treatment under pressure from others. Some patients begin hoarding in response to a stressful event, while others report a slow and steady progression throughout life. Those who report onset due to a stressful event have a later age of onset than those who do not. Those with an earlier age of onset run a longer and more chronic course.

TREATMENT Hoarding disorder is difficult to treat. Although it shows similarities to OCD, effective treatments for OCD have shown little benefit for patients with

hoarding disorder. In one

04 - 10.4 Hair Pulling Disorder (Trichotillomania)

10.4 Hair-Pulling Disorder (Trichotillomania)

study, only 18 percent of patients responded to medication and CBT. The challenges posed by hoarding patients to typical CBT treatment include poor insight to the behavior and low motivation and resistance to treatment. The most effective treatment for the disorder is a cognitive behavioral model that includes training in decision making and categorizing; exposure and habituation to discarding; and cognitive restructuring. This includes both office and in-home sessions. The role of the therapist in this model is to assist in the development of decision-making skills, to provide feedback about normal saving behavior, and to identify and challenge the patient's erroneous beliefs about possessions. The goal in treatment is to get rid of a significant amount of possessions, thereby making the living space livable, and to provide the patient with the skills to maintain a positive balance between the amount of possessions and livable space. Studies have shown a 25 to 34 percent reduction in hoarding behaviors using this method. Restructuring of this method for group and webbased interventions are currently under study and show promise. Pharmacological treatment studies using SSRIs have shown mixed results. Some studies have shown a negative response to SSRI treatment in hoarding patients compared with nonhoarders, while others have found no significant difference between the two groups. REFERENCES DiMauro J, Genova M, Tolin DF, Kurtz MM. Cognitive remediation for neuropsychological impairment in hoarding disorder: A pilot study. *J Obsessive-Compulsive and Related Disorders*. 2014;3(2), 132-138. Frost RO, Steketee G, Tolin DF. Comorbidity in hoarding disorder. *Depress Anxiety*. 2011;28:876. Frost RO, Tolin DF, Steketee G, Fitch KE, Selbo-Brunns A. Excessive acquisition in hoarding. *J Anxiety Disord*. 2009;23:632. Grisham JR, Norberg MM, Williams AD, Certoma SP, Kadib R. Categorization and cognitive deficits in compulsive hoarding. *Behav Res Ther*. 2010;48:886. Hall BJ, Tolin DF, Frost RO, Steketee G. An exploration of comorbid symptoms and clinical correlates of clinically significant hoarding symptoms. *Depress Anxiety*. 2013;30(1):67-76. Hoarding disorder. In: *Diagnostic and Statistical Manual of Mental Disorders*. 5th ed. Washington, DC: American Psychiatric Association; 2013:247. Iervolino AC, Perroud N, Fullana MA, Guipponi M, Cherkas L, Collier DA, Mataix-Cols D. Prevalence and heritability of compulsive hoarding: A twin study. *Am J Psychiatry*. 2009;116:1156. Mataix-Cols D, Billotti D, de la Cruz L, Nordsletten A. The London field trial for hoarding disorder. *Psychol Med*. 2013;43(4):837-847. Timpano KR, Rasmussen J, Exner C, Rief W, Schmidt NB, Wilhelm S. Hoarding and the multi-faceted construct of impulsivity: A cross-cultural investigation. *J*

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10.4 Hair-Pulling Disorder (Trichotillomania)

Hair-pulling disorder is a chronic disorder characterized by repetitive hair pulling,

leading to variable hair loss that may be visible to others. It is also known as trichotillomania, a term coined by a French dermatologist Francois Hallopeau in 1889. The disorder was once deemed rare and little about it was described beyond phenomenology. It is now regarded as more common. The disorder is similar to obsessive-compulsive disorder and impulse control in that there is increased tension prior to the hair pulling and a relief of tension or gratification after the hair pulling.

EPIDEMIOLOGY

The prevalence of hair-pulling disorder may be underestimated because of accompanying shame and secretiveness. The diagnosis encompasses at least two categories of hair pulling that differ in incidence, severity, age of presentation, and gender ratio. Other subsets may exist. The most serious, chronic form of the disorder usually begins in early to midadolescence, with a lifetime prevalence ranging from 0.6 percent to as high as 3.4 percent in general populations and with female to male ratio as high as 10 to 1. The number of men may actually be higher, because men are even more likely than women to conceal hair pulling. A patient with chronic hair-pulling disorder is likely to be the only or oldest child in the family. A childhood type of hair-pulling disorder occurs approximately equally in girls and boys. It is said to be more common than the adolescent or young adult syndrome and is generally far less serious dermatologically and psychologically. An estimated 35 to 40 percent of patients with hair-pulling disorder chew or swallow the hair that they pull out at one time or another. Of this group, approximately one-third develop potentially hazardous bezoars—hairballs accumulating in the alimentary tract.

COMORBIDITY

Significant comorbidity is found between hair-pulling disorder and obsessive-compulsive disorder (OCD); anxiety disorders; Tourette's disorder; depressive disorders; eating disorders; and various personality disorders—particularly obsessive-compulsive, borderline, and narcissistic personality disorders. Comorbid substance abuse disorder is not encountered as frequently as it is in pathological gambling, kleptomania, and other impulse disorders.

ETIOLOGY

Although hair-pulling disorder is regarded as multidetermined, its onset has been linked to stressful situations in more than one-fourth of all cases. Disturbances in mother-child relationships, fear of being left alone, and recent object loss are often cited as critical factors contributing to the condition. Substance abuse may encourage development of the disorder. Depressive dynamics are often cited as predisposing factors, but no particular personality trait or disorder characterizes patients. Some see self-stimulation

as the primary goal of hair pulling. Family members of hair-pulling disorder patients often have a history of tics, impulse control disorders, and obsessive-compulsive symptoms, further supporting a possible genetic predisposition. One study looked at the neurobiology of hair-pulling disorder and found a smaller volume of the left putamen and left lenticulate areas. More recently, a study of the genetics of trichotillomania reported a relationship between a serotonin 2A (5-HT_{2A}) receptor gene polymorphism (T102C) and trichotillomania. However, because these studies examined relatively few subjects, these findings need to be replicated in a larger sample to be able to determine the role of basal ganglia abnormalities and serotonin in the etiology of trichotillomania.

DIAGNOSIS AND CLINICAL FEATURES

The fifth edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-5) includes diagnostic criteria from hair-pulling disorder. Before engaging in the behavior, patients with hair-pulling disorder may experience an increasing sense of tension and

achieve a sense of release or gratification from pulling out their hair. All areas of the body may be affected, most commonly the scalp (Fig. 10.4-1). Other areas involved are eyebrows, eyelashes, and beard; trunk, armpits, and pubic area are less commonly involved (Fig. 10.4-2). FIGURE 10.4-1 Hair-pulling disorder (trichotillomania). Note the typical findings of an area of incomplete alopecia involving the frontal and vertex scalp. (From Sadock BJ, Sadock VA, Ruiz P, eds. Kaplan & Sadock's Comprehensive Textbook of Psychiatry. 9th ed. Philadelphia: Lippincott Williams & Wilkins; 2009, with permission.)

FIGURE 10.4-2 Example of plucking of the pubic hair because of hair-pulling disorder. Two types of hair pulling have been described. Focused pulling is the use of an intentional act to control unpleasant personal experiences, such as an urge, bodily sensation (e.g., itching or burning), or thought. In contrast, automatic pulling occurs outside the person's awareness and most often during sedentary activities. Most patients have a combination of these types of hair pulling. Hair loss is characterized by short, broken strands appearing together with long, normal hairs in the affected areas. No abnormalities of the skin or scalp are present. Hair pulling is not reported as being painful, although pruritus and tingling may occur in the involved area. Trichophagy, mouthing of the hair, may follow the hair plucking. Complications of trichophagy include trichobezoars, malnutrition, and intestinal obstruction. Patients usually deny the behavior and often try to hide the resultant alopecia. Head banging, nail biting, scratching, gnawing, excoriation, and other acts of self-mutilation may be present. Ms. C, a 27-year-old single woman, came to a local clinic complaining of persistent hair pulling. She first started at age 11, when she began to pick the hairs at the nape of her neck. She would persistently pick at the hair until there was almost none left. Fortunately, her hair was long, so no one noticed the lack of hair at the back of her neck. Over the years, her hair picking progressed until she began picking hair from her entire head, leaving noticeable small bald patches. She strategically hid the bald patches by brushing over the remainder of her hair or with carefully placed scarves and hats. Despite her habit, Ms. C was pretty normal. She got good grades in school and was a year away from getting her master's degree. Ms. C's habit was constant, occurring every day, often without her noticing it. She could simply be reading an assignment for school and eventually her hand would find

its way into her hair to find a hair to pull. Soon she would notice a small pile of hairs in her book or on her lap, indicating that she had been pulling her hair out for a while. Whenever she tried to stop herself from pulling her hair, she would become increasingly nervous and anxious until she resumed the hair pulling. Her hair pulling sessions lasted anywhere from 10 minutes to an hour.

PATHOLOGY AND LABORATORY EXAMINATION If necessary, the clinical diagnosis of hair-pulling disorder can be confirmed by punch biopsy of the scalp. In patients with a trichobezoar, blood count may reveal a mild leukocytosis and hypochromic anemia due to blood loss. Appropriate chemistries and radiological studies should also be performed, depending on the bezoar's suspected location and impact on the gastrointestinal (GI) tract.

DIFFERENTIAL DIAGNOSIS Hair pulling may be a wholly benign condition or it may occur in the context of several mental disorders. The phenomenology of hair-pulling disorder and OCD overlap. As with OCD, hair-pulling disorder is often chronic and recognized by patients as undesirable. Unlike those with OCD, patients with hair-pulling disorder do not experience obsessive thoughts, and the compulsive activity is limited to one act, hair pulling. Patients with factitious disorder actively seek medical attention and the patient role and deliberately simulate illness toward these ends. Patients who malingering or who have factitious disorder may mutilate themselves to get medical attention, but they do not acknowledge

the self-inflicted nature of the lesions. Patients with stereotypic movement disorder have stereotypical and rhythmic movements, and they usually do not seem distressed by their behavior. A biopsy may be necessary to distinguish hair-pulling disorder from alopecia areata and tine capitis. COURSE AND PROGNOSIS The mean age at onset of hair-pulling disorder is in the early teens, most frequently before age 17, but onset has been reported much later in life. The course of the disorder is not well known; both chronic and remitting forms occur. An early onset (before age 6) tends to remit more readily and responds to suggestions, support, and behavioral strategies. Late onset (after age 13) is associated with an increased likelihood of chronicity and poorer prognosis than the early-onset form. About a third of persons presenting for treatment report a duration of 1 year or less, whereas in some cases, the disorder has persisted for more than two decades. TREATMENT No consensus exists on the best treatment modality for hair-pulling disorder. Treatment usually involves psychiatrists and dermatologists in a joint endeavor.

Psychopharmacological methods that have been used to treat psychodermatological disorders include topical steroids and hydroxyzine hydrochloride (Vistaril), an anxiolytic with antihistamine properties; antidepressants; and antipsychotics. Initial case reports showed efficacy of selective serotonin reuptake inhibitors (SSRIs) for hair-pulling disorder. Patients who respond poorly to SSRIs may improve with augmentation with pimozide (Orap), a dopamine receptor antagonist. Other medications that have been reported to have some efficacy for hair-pulling disorder include fluvoxamine (Luvox), citalopram (Celexa), venlafaxine (Effexor), naltrexone (ReVia), and lithium (Eskalith). A report of successful lithium treatment cited the possible effect of the drug on aggression, impulsivity, and mood instability as an explanation. In one study, patients taking naltrexone had a reduction in symptom severity. Case reports also indicate successful treatment with buspirone (BuSpar), clonazepam (Klonopin), and trazodone (Desyrel). Successful behavioral treatments, such as biofeedback, self-monitoring, desensitization, and habit reversal, have been reported, but most studies have been based on individual cases or a small series of cases with relatively short follow-up periods. Chronic hair-pulling disorder has been treated successfully with insight-oriented psychotherapy. Hypnotherapy has been mentioned as potentially effective in the treatment of dermatological disorders in which psychological factors may be involved; the skin has been shown to be susceptible to hypnotic suggestion. REFERENCES Bloch MH. Trichotillomania and other impulsive-control disorders. In: Hudak R, Dougherty DD, eds. *Clinical ObsessiveCompulsive Disorders in Adults and Children*. New York: Cambridge University Press; 2011:207. Grant JE, Stein DJ, Woods DW, Keuthen NJ, eds. *Trichotillomania, Skin Picking, and Other Body-Focused Repetitive Behaviors*. Arlington, VA: American Psychiatric Publishing; 2011. Keuthen NJ, Rothbaum BO, Falkenstein MJ, Meunier S, Timpano KR, Jenike MA, Welch SS. DBT-enhanced habit reversal treatment for trichotillomania: 3-and 6-month follow-up results. *Depress Anxiety*. 2011;28:310. Klipstein KG, Berman L. Bupropion XL for the sustained treatment of trichotillomania. *J Clin Psychopharm*. 2012;32:298. Kumar B. The mind-body connection: An integrated approach to the diagnosis of colonic trichobezoar. *Int J Psychiatry Med*. 2011;41:263. Lee HJ, Franklin SA, Turkel JE, Goetz AR, Woods DW. Facilitated attentional disengagement from hair-related cues among individuals diagnosed with trichotillomania: An investigation based on the exogenous cueing paradigm. *J Obsess Compul Relat Disord*. 2012;1:8. Leombruni P, Gastaldi F. Oxcarbazepine for the treatment of trichotillomania. *Clin Neuropharm*. 2010;33:107. Lochner C, Seedat S, Stein DJ. Chronic hair-pulling: Phenomenology-based subtypes. *J Anxiety Disord*. 2010;24:196. McDonald KE. Trichotillomania: Identification and treatment. *J Counsel Dev*. 2012;90:421. Moeller FG. Impulse-control disorders not elsewhere classified. In: Sadock BJ, Sadock VA, Ruiz P, eds. *Kaplan & Sadock's*

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05 - 10.5 Excoriation (Skin Picking) Disorder

10.5 Excoriation (Skin-Picking) Disorder

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10.5 Excoriation (Skin-Picking) Disorder Excoriation or skin-picking disorder is characterized by the compulsive and repetitive picking of the skin. It can lead to severe tissue damage and result in the need for various dermatological treatments. Throughout history, skin-picking disorder has had many names: skin-picking syndrome, emotional excoriation, nervous scratching artifact, epidermotillomania, and para-artificial excoriation.

EPIDEMIOLOGY Skin-picking disorder has lifetime prevalence between 1 to 5 percent in the general population, about 12 percent in the adolescent psychiatric population, and occurs in 2 percent of patients with other dermatologic disorders. It is more prevalent in women than in men.

COMORBIDITY The repetitive nature of skin-picking behavior is similar to the repetitive compulsive rituals found in obsessive-compulsive disorder (OCD), and skin-picking disorder is associated with high rates of OCD. In addition, patients with OCD may have obsessions about contamination and skin abnormalities or may be preoccupied with having smooth skin, flawless complexion, and cleanliness. Other comorbid conditions include hairpulling disorder (trichotillomania, 38 percent), substance dependence (38 percent), major depressive disorder (32 to 58 percent), anxiety disorders (23 to 56 percent), and body dysmorphic disorder (27 to 45 percent). One study reported an association of both borderline and obsessive-compulsive personality disorder (71 percent) in patients with skin-picking disorder.

ETIOLOGY The cause of skin-picking is unknown, however, several theories have been postulated. Some theorists speculate that skin-picking behavior is a manifestation of repressed rage at authoritarian parents. These patients pick at their skin and perform other selfdestructive acts to assert themselves. Patients may pick as a means to relieve stress. For example, skin-picking has been associated with marital conflicts, passing of loved ones, and unwanted pregnancies. According to psychoanalytic theory, the skin is an erotic

organ, and picking at the skin or scratching the skin leading to excoriations may be a source of erotic pleasure. In that sense it has been considered a masturbatory equivalent. Patients may be unaware of these affects presumed to be in the unconscious. Many patients begin picking at the onset of dermatological conditions such as acne and continue to pick after the condition has cleared. Abnormalities in serotonin, dopamine, and glutamate metabolism have been theorized to be an underlying neurochemical cause of the disorder, but further research is needed. **DIAGNOSIS** The fifth edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM) it was called trichotillomania. It was also known as skin-picking syndrome. DSM-5 diagnostic criteria for skin-picking disorder requires recurrent skin-picking resulting in skin lesions and repeated attempts to decrease or stop picking. The skin-picking must cause clinically relevant distress or impairment in functioning. The skin-picking behavior cannot be attributed to another medical or mental condition and cannot be a result of a substance use disorder (e.g., cocaine or methamphetamine use).

CLINICAL FEATURES The face is the most common site of skin-picking (Fig. 10.5-1). Other common sites are legs, arms, torso, hands, cuticles, fingers, and scalp. Although most patients report having a primary picking area, many times they pick other areas of the body in order for the primary area to heal. In severe cases, skin-picking can result in physical disfigurement and medical consequences that require medical or surgical interventions (e.g., skin grafts or radiosurgery).

FIGURE 10.5-1

Skin-picking disorder. Multiple erythematous and pigmented maculae and crusted erosions on chin. (From Sadock BJ, Sadock VA, Ruiz P, Kaplan & Sadock's Comprehensive Textbook of Psychiatry. 9th ed. Philadelphia: Lippincott Williams & Wilkins; 2009, with permission.) Patients may experience tension prior to picking and a relief and gratification after picking. Many report picking as a means to relieve stress, tension, and other negative feelings. In spite of the relief felt from picking, patients often feel guilty or embarrassed at their behavior. Up to 87 percent of patients report feeling embarrassed by the picking and 58 percent report avoiding social situations. Many patients use bandages, makeup, or clothing to hide their picking. Of skin-picking patients, 15 percent report suicidal ideation due to their behavior and about 12 percent have attempted suicide. Ms. J, a 22-year-old single woman, presented to a psychiatrist at the urging of her dermatologist because of compulsive picking at the skin on her face. She picked at it every day up to three times a day in sessions lasting from 20 minutes to over an hour. She had massive scarring and lesions on her face. She went to a physician 6 months prior when one of the lesions had become infected. Ms. J began picking her face at age 11 at the onset of puberty. At first, she only picked at acne that formed on her face, but as the urge to pick became greater, she started picking at clear patches of skin as well. Due to the scarring and lesions, Ms. J became increasingly withdrawn and avoided all social engagements. She reported feeling great tension prior to picking and only after she began picking did she feel relief. **DIFFERENTIAL DIAGNOSIS** The diagnosis of skin-picking disorder cannot be made if the behavior can be better accounted for by another medical or psychological condition. Many medical and dermatological conditions may result in urges to itch and pick at the skin. Conditions include eczema, psoriasis, diabetes, liver or kidney disease, Hodgkin's disease, polycythemia vera, or systemic lupus. Skin-picking can also be seen in Prader-Willi syndrome (97 percent). A thorough physical examination is crucial prior to psychiatric diagnosis. Skin-picking disorder is similar to OCD and it is associated with high rates of comorbid OCD. The disorders differ in a few ways. Skin-picking disorder is prevalent in females while OCD is equal between genders. The compulsions associated with OCD are usually driven by intrusive thoughts, while the compulsion to pick the skin is usually not. Although skin-picking generally decreases anxiety, it can

also entice pleasure in the patient, which is rarely the case in OCD. Skin-picking in OCD patients is usually the result of obsessions about contamination or skin abnormalities. Skin-picking is commonly seen in body dysmorphic disorder. In one study, 45 percent

of body dysmorphic patients report lifetime skin-picking disorder and 37 percent report having skin-picking disorder secondary to body dysmorphic disorder. The skin-picking in body dysmorphic disorder is primarily centered on removing or minimizing believed imperfection in the patient's appearance. Substance use disorders often co-occur with skin-picking disorder. Methamphetamine and cocaine use may result in the sensation that something is crawling on the body or under the skin (formication), which can result in skin-picking. In order to make the diagnosis of skin-picking disorder, however, skin-picking cannot be a physiological effect of substance use. Factitious Dermatitis Factitious dermatitis or dermatitis artefacta is a disorder in which skin-picking is the target of self-inflicted injury and the patient uses more elaborate methods than simple excoriation to self-induce skin lesions. It is seen in 0.3 percent of dermatology patients and has a female to male ratio of 8 to 1. It can present at any age, but occurs most frequently in adolescents and young adults. It can present as an aggravation of dermatosis, targeting a variety of skin lesions including blisters, ulcers, erythema, edema, purpura, and sinuses. The morphology of factitious dermatitis lesions is often bizarre and linear, with clear-cut, angulated, or geometric edges. Presence of completely normal, unaffected skin adjacent to the horrific-looking lesions is a clue to the diagnosis of factitious dermatitis (Fig. 10.5-2). In addition, the patient's description of history of the skin lesions is usually vague and lacks detail about the appearance and evolution of the lesions.

FIGURE 10.5-2 Typical self-produced lesions with scabbing. (From Douthwaite AH, ed. French's Index of Differential Diagnosis. 7th ed. Baltimore: Williams & Wilkins; 1954, with permission.)

COURSE AND PROGNOSIS The onset of skin-picking disorder is either in early adulthood or between 30 and 45 years of age. Onset in children before age 10 years has also been seen. The mean age of onset is between 12 to 16 years of age. There may be a lag of time between onset and actual diagnosis. Because little is known about the disorder, many are unaware that it can be treated. Many times patients do not seek treatment until a severe dermatological or medical condition has developed. Typically, symptoms wax and wane over the course of the patient's life. Approximately 44 percent of women report that the amount of picking coincides with their menstrual cycle.

TREATMENT Skin-picking disorder is difficult to treat and there are few data on effective treatments. Most patients do not actively seek treatment due to embarrassment or because they believe their condition is untreatable. There is support for the use of selective serotonin

reuptake inhibitors (SSRIs). Studies comparing fluoxetine (Prozac) against placebo has shown fluoxetine to be superior in reducing skin-picking. The opioid antagonist naltrexone (Revia) has proven to reduce the urge to pick, particularly in patients who experience pleasure from the behavior. Glutamatergic agents and lamotrigine (Lamictal) have also shown efficacy.

Nonpharmacological treatments include habit reversal and brief cognitive-behavioral therapy (CBT). Effective therapy requires both psychological and somatic treatment. In some cases mechanical prevention of skin-picking by different protective measures may be of use in an effort to break the cycle. Psychotherapy at the same time deals with the underlying emotional factors.

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