

Vomiting As A Manifestation Of Borderline Personality Disorder In Primary Care

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Background: Patients with borderline personality disorder often are found and treated in psychiatric settings following episodes of self-mutilation, such as wrist-slashing. Family physicians care for many patients with borderline personality disorder, but in primary care settings wrist-slashing or other physical mutilation is a less common presenting problem. Frequently these patients complain of such symptoms as nausea and vomiting that do not so obviously suggest psychopathology.

Methods: Three primary care patients with borderline personality disorder in whom episodic vomiting was the chief complaint are presented. Hypotheses from the literature about the neurobiology of vomiting and self-mutilation are discussed.

Results: Vomiting is a primary care analogue of self-mutilation in some patients with borderline personality disorder.

Conclusions: Family physicians should include careful history taking to corroborate other features of borderline personality disorder in evaluating patients with persistent, episodic vomiting. Obtaining a history of early sexual abuse or chronic interpersonal problems as an adult should not only mitigate the compulsion for extensive, costly, and invasive gastrointestinal system evaluations in such patients, but also suggest more effective treatment strategies. (J Am Board Fam Pract 1993; 6:385-94.)

Personality disorders (axis II disorders in the DSM-III-R¹) are relatively inflexible, maladaptive ways of perceiving and relating to both oneself and others, leading to personal distress and impairment of social and occupational functioning. They also are the least likely common psychiatric problems to be diagnosed by primary care physicians.² Borderline personality disorder is a particularly pernicious condition that frequently is diagnosed in emergency department settings when patients are treated for self-mutilation, typically by wrist-slashing.

This report of three patients shows that patients with borderline personality disorder can come to a family physician with a different complaint — episodic vomiting — which can be viewed as a primary care analogue of self-mutilation. By taking a careful history, family physicians can increase their awareness of borderline personality disorder while simultaneously mitigating the compulsion to conduct extensive, costly, and in-

sive gastrointestinal system evaluations in certain primary care patients with episodic vomiting.

Borderline Personality Disorder

Borderline personality disorder is estimated to affect 5 to 10 percent of the general population and perhaps 15 percent of hospitalized patients.³⁻⁵ A recent review summarized borderline personality disorder and its treatment in primary care.⁶ Although there could be a biological predisposition to the disorder,⁴ the genesis of borderline personality disorder is usually attributed to pervasive inconsistencies in early relationships with others, such as abandonment by parents or by sexual, emotional, or physical abuse.⁷⁻¹⁰ The behavioral manifestations of borderline personality disorder are outlined in the DSM-III-R (Table 1).

The lives of persons with borderline personality disorder are marked by episodic affective and behavioral instability, although periods of profound upheaval are typically interspersed with periods of apparent competence. Persons with borderline personality disorder have chaotic interpersonal relationships, which result from lack of a capacity for basic trust so profound that they vacillate between overidealization and devaluation of both themselves and others as they

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Table 1. DSM-III-R Criteria for Borderline Personality Disorder.

1. A pattern of unstable and intense interpersonal relationships characterized by alternating between extremes of overidealization and devaluation
2. Impulsiveness in at least two areas that are potentially self-damaging
3. Affective instability: marked shifts from baseline mood to depression, irritability, or anxiety, usually lasting a few hours and rarely more than a few days
4. Inappropriate, intense anger or lack of control of anger (e.g., frequent displays of temper, constant anger)
5. Recurrent suicidal threats, gestures, or behavior, or self-mutilating behavior
6. Marked and persistent identity disturbance manifested by uncertainty about at least two of the following: self-image, sexual orientation, long-term career goals or career choice, type of friends desired, preferred values
7. Chronic feelings of emptiness or boredom
8. Frantic efforts to avoid real or imagined abandonment

desperately search for evidence that individuals are either all good or all bad (termed *splitting*). Borderline patients also are highly sensitive to rejection and susceptible to abandonment depression. Having a poor self-image, such patients have strong needs to be in relationships in which they are dependent (termed *object hunger*). Nevertheless, they expect to be abandoned and often react in hostile and accusatory ways to seemingly benign behavior on the part of others.

Family physicians often experience patients with borderline personality disorder as emotionally draining because such patients experience few sustained periods of physical or emotional well-being. Borderline personality disorder patients often create disagreement and turmoil among office staff^{3,6} and also can be frustrating for family physicians because they typically present with difficult-to-treat problems, such as dysthymia, major depression, substance abuse, or somatoform disorders.

Self-Mutilation in Patients with Borderline Personality Disorder

One symptom thought to be pathognomonic of borderline personality disorder in psychiatric settings is repetitive self-destructive acts. These acts can take more subtle forms, such as drug and alcohol abuse, or they can involve more overt self-mutilation, including wrist-slashing, cigarette burns, or scratching the skin, always without the intention of producing death.

Explanations for self-mutilation in individuals with borderline personality disorder include (1) expressions of rage turned inward, (2) attempts to communicate, and (3) strategies for relieving dysphoria. The first is an expression of rage resulting from some perceived wrong or the failure of others to be supportive and caring. In the second, self-mutilation is a manipulative way of expressing hurt, anger, frustration, and neediness. The third explanation is based on the recognition that self-mutilation usually occurs when patients feel extreme dysphoria.

Phenomenologically, borderline personality disorder patients describe tension and feelings of "coming part inside," "shrinking into nothingness," "emptiness," or "lack of feeling." Although there can be amnesia to the actual physical act and the resultant pain, patients who slash their wrists typically report feeling relief from dysphoria at the moment of the act, followed by a trancelike state of calm. Afterward, there often are feelings of self-reproach or self-hatred and a recognition that what they had done was dangerous. Subsequently, patients again faced with the dysphoria might try to postpone self-mutilation but finally succumb when anxiety becomes intolerable.

Self-mutilating patients with borderline personality disorder seem to experience a special type of anticipatory anhedonia. Although they cannot anticipate pleasure, once they become involved in an activity, they have some capacity for enjoying it.⁵ It is important to distinguish between anticipatory anhedonia and the more global anhedonia experienced by suicidal patients with classic major depressions. Some individuals with borderline personality disorder who self-mutilate also suffer from superimposed, classic endogenous depressions and are at much greater risk for planned, lethal suicide attempts. The borderline patient with only anticipatory anhedonia is more prone to low-risk, impulsive self-mutilation.

Case Reports

Each of the following family practice patients had episodic vomiting as a primary complaint. Careful history and psychodiagnostic interviewing revealed that all three patients met criteria for borderline personality disorder and that the vomiting had dysphoria-reducing or attention-seeking qualities.

Case 1

A 26-year-old woman was hospitalized after being seen twice in 3 days in a family medicine outpatient clinic. On her initial clinic visit she complained of persistent nausea, vomiting, and mild abdominal cramping for 4 days. She denied any fever, chills, hematemesis, or diarrhea. She also complained of constant, dull, left-lower-quadrant abdominal pain, as well as a creamy vaginal discharge and dysuria. During the physical examination the patient was in no apparent distress; her abdomen was soft and without guarding, rebound tenderness, or palpable masses. A foul-smelling vaginal discharge showed clue cells on microscopic examination. A gonorrhea culture was negative. There were no other unusual physical findings. The patient's condition was diagnosed as mild pelvic inflammatory disease and nonspecific vaginitis, and she was sent home with prescriptions for doxycycline 100 mg twice a day for 10 days and promethazine suppositories 25 mg every 4 to 6 hours.

The patient returned to the outpatient clinic 2 days later complaining of continued nausea and vomiting, despite using promethazine suppositories. She appeared to have no acute distress, and good skin turgor and moist mucous membranes were noted. Her abdominal examination was remarkable for continued mild pain, now in the left upper quadrant, as well as bilateral pelvic tenderness. Her weight was 152.5 pounds, blood pressure 110/70 mmHg, and temperature 99.0°F. Laboratory data were sodium 142 mEq/L, potassium 4.7 mEq/L, chloride 109 mEq/L, blood urea nitrogen (BUN) 22 mg/dL, creatinine 1.5 mg/dL, glucose 81 mg/dL. Because borderline elevations of BUN and creatinine could be attributed to mild dehydration, she was given fluids intravenously. She also received intramuscular ceftriaxone and promethazine in the clinic and was referred for an abdominal sonogram, which was unremarkable.

The patient was admitted to the hospital the next day complaining of continued intractable vomiting, fever, chills, and no bowel movements for 7 days. On admission her temperature was 99.2°F, blood pressure 120/90 mmHg, and pulse 76 beats per minute. Physical examination was unremarkable except for moderate bilateral suprapubic tenderness, mild cervical motion tenderness, and bilateral adnexal tenderness. The

abdomen was soft with infrequent bowel sounds and no rebound or guarding. Guaiac testing of stool for occult blood was negative. A urine pregnancy test was negative. Laboratory data were essentially unchanged. Diagnostic work-up included a gallbladder sonogram, an upper gastrointestinal barium radiograph with a small-bowel follow-through, and computed tomographic (CT) scans of the abdomen and pelvis. Upright and plane films of the abdomen, as well as a barium enema, were obtained. All findings were within normal limits, although slight splenomegaly was noted on abdominal CT scan. Gynecologic consultants did not believe that there was an organic disorder to explain the patient's symptoms.

Although the patient was witnessed vomiting small amounts in the hospital, she was never awakened by nausea and vomiting at night. Several days into her hospitalization, nursing staff observed the patient to be chewing her food, mixing it with fluid, and spitting it back into the emesis trays, pretending to be retching. In addition to no electrolyte abnormalities indicative of protracted vomiting, promethazine administered orally, rectally, intramuscularly, and intravenously did not alleviate the symptoms, which became worse each time discharge plans were discussed.

Psychological consultation was obtained on the patient's 12th hospital day. Diagnostic interviews were conducted, and a Minnesota Multiphasic Personality Inventory (MMPI)¹¹ was obtained and scored. Pertinent details of the patient's history were that she was sexually abused by a grandfather from the ages of 2 to 20 years, and she had been in therapy at a local women's center for the year before this admission. She had 3 children, each with a different father. Two of the children lived with the patient at the time of hospitalization, although she had no contact with either father. With her third pregnancy, the result of a rape, the baby was carried to term and given up for adoption. The patient was engaged but had no immediate plans to marry, and she had a turbulent relationship with her fiancé, as well as with her mother.

Importantly, the patient's therapist at the women's center terminated therapy approximately 1 week before her admission to the hospital, reportedly because she believed the patient was "not going anywhere in therapy." The therapist reported she could not do enough to help the

patient, who regarded her therapy "more as friendship." The therapist described the patient as a "very dependent person who suffered bouts of nausea and vomiting on many previous occasions." The patient admitted that she had a history of similar episodes of nausea and vomiting every 6 to 12 months for several years and had been hospitalized for similar conditions in 1985. She described vomiting as a response to feeling "empty," "worthless," and "frantic." Although she thought that she could not express such thoughts to anyone directly, her dysphoria would be relieved temporarily by vomiting. Also, when she was sick, her mother and boyfriend would help with chores around the house; at other times she was unsure about their support. Regarding her therapy, the patient said that she was "really getting something out of therapy" and felt puzzled and abandoned when it stopped.

The patient's MMPI profile (Welsh code 1*2/867304/9-5 F/L/K:) was suggestive of someone admitting to severe psychological problems while naively trying to appear psychologically sound, suggesting a lack of self-insight and psychological sophistication. The patient appeared to be either "faking bad," malingering, or "crying for help" in her approach to the MMPI.

Persons with such profiles have profound depression and attacks of anxiety and typically develop immobilizing physical symptoms. The profile is characteristic of those who are overwhelmed by feelings of guilt, inadequacy, self-doubt, or worthlessness. Such persons typically are described as shy, submissive, inhibited, and ruminative. They tend to have recurrent marital or work problems. In medical settings they tend to be cynical or critical of caregivers who are perceived as not giving enough attention to their physical problems.

The profile is consistent with psychogenic vomiting. Although the condition was unrecognized by her family physicians, she had apparently reacted to stressful situations with similar symptoms in the past. The immediate stressor most likely responsible for the exacerbation leading to hospitalization was perceived abandonment by her therapist, as well as fears of being abandoned by her fiancé.

The patient was discharged from the hospital after 14 days, even though her vomiting, which had become much less frequent following a covert behavior modification plan carried through by

nursing staff during the latter part of her hospitalization, worsened in the hours before discharge. On her first evening out of the hospital, she took an overdose of amitriptyline and was readmitted to a psychiatric inpatient facility. She was discharged after 2 days, with follow-up care to be provided by her original outpatient therapist.

Case 2

A 33-year-old woman was seen in 1989 by a new family medicine resident in the outpatient clinic for complaints of chronic depression and weight gain. Her weight at the time of that visit was 170 lb (height 5 ft 5 in), up 6 lb from 6 months before, but up 30 lb from the previous year. Her blood pressure was 138/75 mmHg, pulse 59 beats per minute, and temperature 98.5°F. Because she had a positive family history of bipolar affective disorder and had "been on several antidepressants that didn't work before," she had been prescribed carbamazepine. Because the carbamazepine "made her feel drugged and gain weight," she was prescribed fluoxetine and referred for counseling at the local mental health center.

She returned to the clinic 1 month later complaining of nausea and vomiting for 3 days and right-upper-quadrant pain, and she was provided prochlorperazine suppositories. A sonogram and liver function tests were ordered, which revealed a "fatty liver," elevated liver function tests (aspartate aminotransferase [AST] 51 U/L, total bilirubin 0.5 mg/dL, direct bilirubin 0.1 mg/dL, alkaline phosphatase 118 U/L, lactic dehydrogenase [LDH] 202 U/L), normal gall bladder, and normal pancreas. On physical examination, the patient's abdomen was mildly tender, with no distension, rebound tenderness, or guarding. Bowel sounds were active.

Findings of a review of her records from earlier hospitalizations and physician visits were striking. The patient's complaints of depression dated back for a decade and included a psychiatric hospitalization 1 year before coming to our clinic. In addition, her medical history included three obstetric hospitalizations, a dilatation and curettage, at least three inpatient admissions for nausea and vomiting, a hysterectomy and left oophorectomy, hospitalization for several episodes of colitis, and a right oophorectomy for an ovarian cyst; early in 1989 she underwent a cholecystectomy that did not provide any relief from her nausea and vomiting.

The patient had first received treatment for depression 5 years previously, following a divorce from her first husband and the death of her mother. She was prescribed a combination of maprotiline (150 mg at bedtime) and weekly psychotherapy. She did well for about 1 year but began to complain about tension headaches, muscle spasms, abdominal pain, sweating, palpitations, breast pain, leg pains, and pelvic pain. She also complained about mood swings, exhaustion, uncontrollable anger, and suicidal ideation. Importantly, on an average of about twice each year, she complained of episodes of nausea and vomiting, each time associated with subjective feelings of stress in her family life. Figure 1 shows that, as her psychotherapy visits declined in frequency, her visits for physical complaints increased, and vice versa.

The review of medical records also revealed a plethora of psychiatric diagnostic impressions, including depression, hysteroid personality, somatization disorder, anxiety, premenstrual syndrome, stress-irritable bowel syndrome, and bi-

polar affective disorder, in addition to somatic diagnoses including sinusitis, possible connective tissue disorder, urinary tract infection, possible cholelithiasis, possible endometriosis, possible thyroid disorder. With the exception of chronic, mild elevations in liver function tests (AST 51–88 U/L, alkaline phosphatase 118–122 U/L, LDH 171–202 U/L), other laboratory data were consistently within normal limits. Upper endoscopies had revealed erosive esophagitis on two occasions; she also had undergone radiologic upper and lower gastrointestinal studies and a liver biopsy with negative results.

Her weight continued to increase (Figure 2), and her electrolytes remained within normal limits despite episodes of vomiting. During the 5-year period before 1989 for which medical records were available, the patient was prescribed multiple medications, including maprotiline, chlordiazepoxide-clidinium bromide, alprazolam, amitriptyline, buspirone, perphenazine, carbamazepine, fluoxetine, lithium carbonate, and hydroxyzine, in addition to perphenazine and

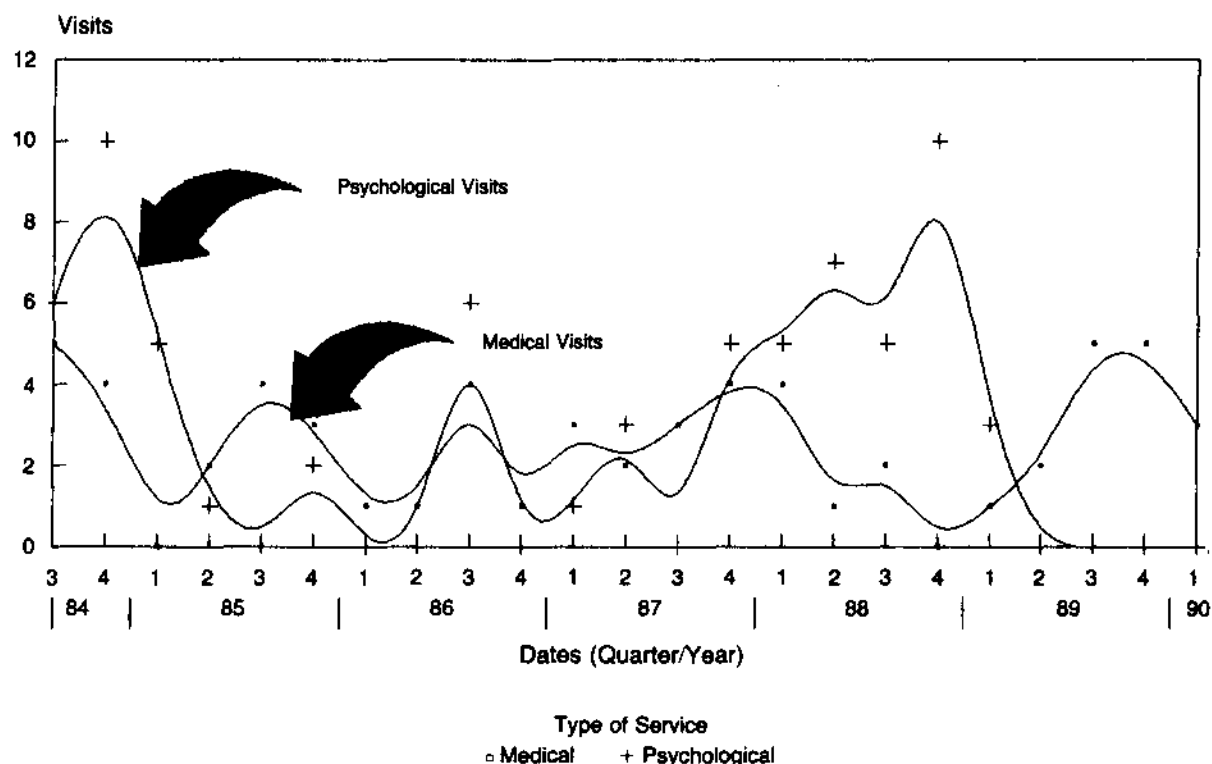


Figure 1. Type and number of clinic visits in case 2. Note: points show actual number of visits; lines are the best-fit-of-data points and illustrate trends over time.

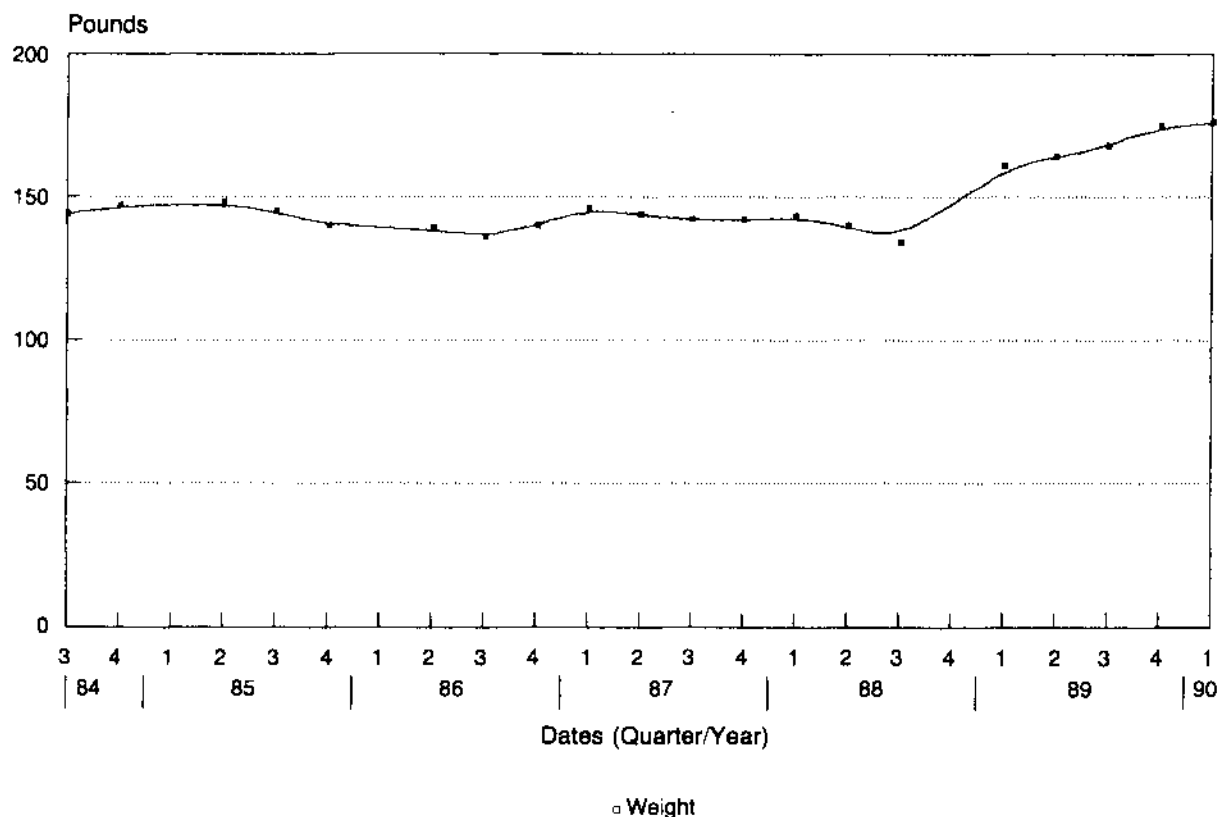


Figure 2. Weight of patient in case 2 during treatment. Note: points show actual weight in pounds; line is the best-fit-of-data points and illustrates trend over time.

promethazine, in attempts to control nausea and vomiting.

The patient reported having been raised as the 3rd of 5 children in a "close family" that "always did everything together." She denied emotional problems in the family but reported that her mother was frequently ill and not emotionally available to her and that her father had alcohol problems.

She first married at the age of 17 years to a man who was physically and emotionally abusive, had a daughter, and divorced. She remarried 5 years later and had 2 sons, one who was schizophrenic and the other who had attention deficit hyperactivity disorder. Both sons also suffered from enco-
 prosis and were institutionalized for periods of time. After divorcing her second husband, the patient had several boyfriends and finally remarried for a third time, although they had a stormy relationship and regularly discussed divorce.

The patient had been out of work for 1 year, primarily because of the nausea and vomiting. When questioned about her vomiting, the patient

showed surprisingly little affect. She reported feeling "guilty," "disintegrating inside," and "unable to cope" before each episode. Vomiting made her feel transiently better emotionally, but this relief soon gave way to even stronger feelings of helplessness, hopelessness, guilt, and worthlessness. Although husbands or boyfriends initially responded with concern or made fewer demands on her, each quickly learned to ignore her distress.

Case 3

A 35-year-old woman who worked part time and without great ambition as an attorney in a group practice came to the outpatient clinic with complaints of episodic nausea and vomiting and chronic depression. Her nausea and vomiting had occurred numerous times during the past several years and was typically associated with periods of emotional turmoil. Most recently, she had experienced two episodes of emesis, one each morning upon arising for the past 2 days. All laboratory values were within normal limits, and a pregnancy test was negative. Her physical examination was

unremarkable, and the patient was in no apparent physical distress, although she did become tearful during the interview.

This patient related her rather chronic dysphoria to the impending divorce from her husband of 7 years, an investment banker from whom she had been separated for approximately 3 months. She reported that their unsatisfactory relationship was more "like a friendship," and that she had sought other sexual partners at various times during the marriage. Interestingly, she reported that even before her marriage she seemed to have either sexual relationships that were chaotic or good friendships that were platonic but could not develop a relationship with someone that was both sexual and interpersonally satisfying.

For the 2 months before she came to the clinic, she had been living with a woman coworker with whom she had become sexually involved. This lesbian experience was her first, and she described the relationship as "wonderful" and "just what I have always been looking for." In the day or two leading up to her clinic visit, however, this friend had begun to ask for even greater commitment and to express doubts about the future of the relationship if such assurances from the patient were not forthcoming. The patient noted that as they discussed these issues, she began to feel "panicky and frantic" but "paralyzed and empty inside." This feeling became overwhelming and was quickly followed by vomiting, which not only elicited attention from her partner but also resulted in a temporary feeling of "calmness."

Further social history revealed that the patient had been sexually abused between the ages of 5 and 9 years by a relative who lived nearby and that she had not told anyone about this abuse up to the present time.

The patient was prescribed fluoxetine and received intensive psychotherapy, and she had only one additional episode of vomiting during the next 6 months.

Discussion

Psychobiology of Self-Mutilation and Vomiting

What is the basis for equating self-mutilation and vomiting in patients with borderline personality disorder? One key is an epidemiological association between self-mutilation and bulimia. Such an association was hypothesized as early as 1978.¹² Subsequent studies have been cited indicating

that between 30 percent and 57 percent of patients with eating disorders have histories of self-injurious behavior or diagnoses of personality disorder¹³ and that among patients selected for self-mutilating behavior, there are comparable rates of bulimia, especially bulimia complicated by laxative abuse.¹⁴ The rates of personality disorder in patients with bulimia have been reported at between 56 percent and 63 percent.^{15,16} In one study of 12 consecutive admissions for bulimia, 9 patients also had borderline personality disorder diagnoses.¹⁷

A second key is an examination of the phenomenological descriptions of self-mutilation by individuals with borderline personality disorder and bulimia, which reveals striking parallels. When studying patients who chronically self-mutilate, five stages consistently define the self-injuring acts: (1) a precipitating event, such as real or threatened loss of an important relationship, (2) escalation of dysphoria, (3) attempts to forestall the self-injury, (4) self-mutilation, and (5) a clear aftermath with relief from tension.¹⁸ Patients report that feelings of pain are absent or that pain perception is experienced as relief, reassurance, distraction from dysphoria, or empowerment in the face of helplessness.¹⁴ Much as the borderline personality disorder patients described above, patients who are bulimic also report escalating dysphoria that is relieved by vomiting. As do many borderline personality disorder patients after self-mutilation, patients who are bulimic describe a feeling of calm and dissociation after vomiting and often plan purging to ensure that they will be able to sit quietly in a relaxed environment afterward. Interestingly, the same descriptions of escalating dysphoria followed by calm after their "fixes" are typical of opiate abusers.

The similarities in phenomenological descriptions by patients with borderline personality disorder, bulimia, and opiate addiction suggest a third basis for equating self-mutilation and vomiting: the possibility that there is a common neurobiologic pathway to explain the similar psychological effects of self-mutilation and vomiting. One possible explanation rests with the recognition that painful stimulation results in increased endorphin release¹⁹; in response to painful stimuli, endogenous opiates are produced, leading to feelings of well-being, greater tolerance for pain, and so on. Indeed, when retarded and other

self-mutilating patients have been given naloxone or naltrexone (opiate antagonists) to block the pleasurable effects of endorphins, there is reduction in such behavior, suggesting that pleasurable stimulation of endogenous opiates can result from, and operantly reinforce, self-mutilation.¹⁴ Furthermore, measurements of plasma neuropeptides in self-injurious patients indicate that such patients have higher levels of met-enkephalin, which presumably mirror higher levels in the central nervous system.²⁰

Self-injurious behavior can also be viewed as a form of aggression, which is associated with serotonergic depletion in the central nervous system. Some studies have reported reduction in self-injurious behavior in patients with Lesch-Nyhan syndrome when administered 5-hydroxytryptophan (a serotonin precursor).¹⁴ More importantly, however, are similarities noted between self-injurious behavior and obsessive-compulsive disorder, a condition that has been associated with serotonin deficiency and treated with the new selective serotonin reuptake inhibitors (SSRIs).^{21,22} Studies of serotonergic activity in patients with various personality disorders have indicated that patients with borderline personality disorder who self-mutilate show the greatest variance from controls.^{23,24} In short, neuroendocrinologic dysregulation appears to underlie obsessive-compulsive disorder, vomiting in bulimia, and the self-mutilation in borderline personality disorder, all of which also are characterized by irresistible urges and gradually increasing tension as attempts are made to control the urges, followed by great relief after expression of the urges in actual behavior.

Finally, there is some suggestion from the treatment literature that there might be a common neurobiologic pathway underlying the self-mutilation of borderline personality disorder and vomiting in bulimia. Tricotillomania, a mild form of self-mutilation, has been treated successfully with the serotonin reuptake inhibitor fluoxetine.²⁵ Borderline personality disorder patients who self-mutilate have been successfully treated with both monoamine oxidase inhibitors and fluoxetine, as well as with carbamazepine.²⁶

Treatment Implications and Recommendations

When a family practice patient complains of vomiting, it is clear that initial investigation of possible organic causes is appropriate. On the

other hand, there are certain patients in primary care whose complaints of vomiting deserve simultaneous evaluation from a psychiatric perspective. The cases presented suggest that patients who chronically complain about episodic vomiting without weight loss or other obvious physical findings, for example, should have their complaints assessed by the following approach (Table 2).

First, the patient's attitude toward vomiting needs to be carefully characterized. Does the patient have a type of indifference to his or her symptoms (sometimes referred to as *la belle indifférence*)? This air of complaining without concern often is thought of as part of a histrionic or conversion disorder profile but could also be characteristic of patients with borderline personality disorder.

Second, upon careful questioning, does the patient describe feelings of escalating dysphoria leading up to vomiting, followed by temporary relief from the dysphoria? Moreover, does the vomiting tend to occur following interactions with others in which there is a threat of abandonment? Typically, patients with borderline personality disorder will be very sensitive to rejection or lack of interest. In the cases presented above, vomiting always occurred when abandonment depression, the psychological manifestation of rejection sensitivity, was aroused.

Third, is the patient's social history compatible with borderline personality disorder, such as multiple marriages, patterns of unstable employ-

Table 2. Screening Questions for Evaluating Episodic Vomiting in Patients.

1. Does the patient exhibit indifference to his or her vomiting?
2. Does the patient describe feelings of escalating dysphoria before vomiting?
3. Does vomiting tend to occur following interactions in which there is a real or imagined threat of abandonment?
4. Is the patient's social history characterized by instability, such as multiple marriages, inconsistent employment, or chaotic interpersonal relationships?
5. Is there evidence from childhood history of indifferent or abusive parents or a history of sexual abuse?
6. Is there a history of suicide attempts or self-mutilation?
7. Is there a history of emotional lability or difficulty controlling emotions?
8. Is there evidence of overidealization and devaluation in relationships?
9. Is vomiting followed by temporary relief from dysphoria?

ment, or chaotic interpersonal relationships? Is there evidence from early developmental history of indifferent or abusive parents? Is there a history of sexual abuse? Is there a history of self-mutilation or suicide attempts? These types of histories seem to be associated with borderline personality disorder.

Fourth, is there a history of emotional lability with difficulty controlling emotions? Moreover, is there evidence of overidealization and devaluation in relationships? Some forewarning of this tendency could come in the form of the patient saying something to the effect of "I've been to several doctors about this and they were all worthless . . . I'm glad I have found you because I can tell you really care and will help me!" This approach by patients might be flattering, but it must be viewed as part of the splitting and overidealization that is so typical in borderline personality disorder patients.

Clearly, much of the information needed to raise clinical suspicion for borderline personality disorder in the differential diagnosis of the vomiting patient can be gleaned from careful questioning and observation in the outpatient setting. Interviewing an informant, which is important when trying to assess borderline personality disorder from a research standpoint,²⁷ also might prove helpful in clinical practice. Guidelines for caring for borderline personality disorder patients, in general, should be applied to the vomiting patient with borderline personality disorder.⁶

Information gathered from the above approach that suggests borderline personality disorder could mitigate the costly search for organic causes of vomiting. Instead, cognitive and behavioral approaches, in which the patient is taught to recognize that emotional upheaval and vomiting are linked experientially and neuroendocrinologically and in which the patient is encouraged to begin to modulate emotions, can be effective. Simultaneous pharmacotherapy, using drugs that treat affective instability and rejection sensitivity in borderline personality disorder patients (such as fluoxetine, the newer selective serotonin reuptake inhibitors, or carbamazepine), can be beneficial. Benzodiazepines should not be used, as they tend to increase disinhibition and affective expression.

There is a spectrum of severity in borderline personality disorder. Some patients are relatively high functioning and have the intellectual, char-

acterological, and social resources to respond well to therapy. Others will regress and persist in vomiting to the point that hospitalization might be necessary. In either case, astute clinicians will realize that borderline personality disorder patients are very dependent underneath an independent facade and will be hypervigilant to abandonment by caregivers. When working with such patients, particular attention must be paid to the implicit and explicit dynamics of the physician-patient relationship. In very regressed borderline personality disorder patients who are hospitalized and whose vomiting has stopped, vomiting might recur as soon as discharge plans are discussed.

References

1. Diagnostic and statistical manual of mental disorders. 3rd ed. Revised. Washington, DC: American Psychiatric Association, 1987.
2. Andersen SM, Harthorn BH. The recognition, diagnosis, and treatment of mental disorders by primary care physicians. *Med Care* 1989; 27:869-86.
3. Magill MK, Garrett RW. Borderline personality disorder. *Am Fam Physician* 1987; 35:187-95.
4. Gunderson JG. Borderline personality disorder. Washington, DC: American Psychiatric Press, 1984.
5. Gardner DL, Cowdry RW. Suicidal and parasuicidal behavior in borderline personality disorder. *Psychiatr Clin North Am* 1985; 8:389-403.
6. Searight HR. Borderline personality disorder: diagnosis and management in primary care. *J Fam Practice* 1992; 34:605-12.
7. Kernberg OF. Borderline conditions and pathological narcissism. New York: Jason Aronson, 1975.
8. Zetzel ER. A developmental approach to the borderline patient. *Am J Psychiatry* 1971; 127:867-71.
9. Masterson JF. Psychotherapy of the borderline adult: a developmental approach. New York: Brunner/Mazel, 1976.
10. *Idem*. The narcissistic and borderline disorders: an integrated developmental approach. New York: Brunner/Mazel, 1981.
11. Hathaway SR, McKinley JC. Manual for administration and scoring of the MMPI. Minneapolis: National Computer Systems, 1983.
12. Yaryura-Tobias JA, Neziroglu F. Compulsions, aggression and self-mutilation: a hypothalamic disorder? *J Orthomol Psychiatry* 1978; 7:114-7.
13. Gartner AF, Marcus RN, Halmi K, Loranger AW. DSM-III-R personality disorders in patients with eating disorders. *Am J Psychiatry* 1989; 146:1585-91.
14. Winchel RM, Stanley M. Self-injurious behavior: a review of the behavior and biology of self-mutilation. *Am J Psychiatry* 1991; 148:306-17.
15. Levin AP, Hyler SE. DSM-III personality diagnosis in bulimia. *Compr Psychiatry* 1986; 27:47-53.

16. Gwirtsman HE, Roy-Byrne P, Yager J, Gerner RN. Neuroendocrine abnormalities in bulimia. *Am J Psychiatry* 1983; 140:559-63.
17. Katz SE, Levendusky PG. Cognitive-behavioral approaches to treating borderline and self-mutilating patients. *Bull Menninger Clin* 1990; 54:398-408.
18. Leibenluft E, Gardner DL, Cowdry RW. The inner experience of the borderline self-mutilator. *J Pers Disorders* 1987; 1:317-24.
19. Willer JC, Dehen H, Cambier J. Stress induced analgesia in humans: endogenous opioids and naloxone-reversible depression of pain reflexes. *Science* 1981; 212:680-91.
20. Coid J, Allolio B, Rees LH. Raised plasma met-enkephalin in patients who habitually mutilate themselves. *Lancet* 1983; 2:545-6.
21. Thoren P, Asberg M, Cronholm B, Jornestedt L, Traskman L. Clomipramine treatment of obsessive-compulsive disorder, I. A controlled clinical trial. *Arch Gen Psychiatry* 1980; 37:1281-5.
22. Goodman WK, Price LH, Charney DS. Fluvoxamine in obsessive-compulsive disorder. *Psychiatr Ann* 1989; 19:92-6.
23. Coccaro EF, Siever LJ, Klar HM, Friedman RA, Moskowitz RN, Davis KL. 5-HT function in borderline personality disorders. In: New research program and abstracts, 140th annual meeting of the American Psychiatric Association. Washington, DC: American Psychiatric Association, 1987.
24. Coccaro EF, Siever LJ, Klar HM, Maurer G, Cochran K, Cooper TB. Serotonergic studies in patients with affective and personality disorders: correlates with suicidal and impulsive and aggressive behavior. *Arch Gen Psychiatry* 1989; 46:587-99.
25. Swedo SE, Leonard HL, Rapoport JL, Lenane MC, Goldberger EL, Cheslow DL. A double-blind comparison of clomipramine and desipramine in the treatment of trichotillomania (hair-pulling). *N Engl J Med* 1989; 321:497-501.
26. Gardner DL, Cowdry RW. Positive effects of carbamazepine on behavioral dyscontrol in borderline personality disorder. *Am J Psychiatry* 1986; 143:519-22.
27. Zimmerman M, Pfohl B, Stangl D, Corenthal C. Assessment of DSM-III personality disorders: the importance of interviewing an informant. *J Clin Psychiatry* 1986; 47:261-3.