Management of Rumination and Obsessions in Primary Care

Sharmin Ghaznavi, MD, PhD; Charlotte Schiewe, BSc; and Theodore A. Stern, MD

Lessons Learned at the Interface of Medicine and Psychiatry

The Psychiatric Consultation Service at Massachusetts General Hospital sees medical and surgical inpatients with comorbid psychiatric symptoms and conditions. During their twice-weekly rounds, Dr Stern and other members of the Consultation Service discuss diagnosis and management of hospitalized patients with complex medical or surgical problems who also demonstrate psychiatric symptoms or conditions. These discussions have given rise to rounds reports that will prove useful for clinicians practicing at the interface of medicine and psychiatry.

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Author affiliations are listed at the end of this article.

Have you ever encountered a patient who repeatedly recounted their distressing thoughts? Have you puzzled over how you can help them to manage their troublesome thoughts? Have you struggled to remain even-tempered despite their seeming failure to heed your advice? If you have, the following case vignette and discussion should prove useful.

CASE VIGNETTE

Ms C, a 55-year-old woman with a history of depression, diabetes, and hypertension, reported that she was having a hard time sleeping and functioning following a breakup with a man she had been seeing for a little over a year. Even though it was nearly 4 months since the breakup, she described ongoing difficulty with sleeping and eating; she also struggled more during the daytime when she repeatedly went over mistakes she made during the relationship and was preoccupied by what she might have done differently. Sometimes this led to a downward spiral where she wondered about other flawed life choices and decisions. She bemoaned the fact that her friends and family had become tired of hearing her obsessing about what led to the breakup and to every other wrong decision she had ever made. She became increasingly depressed, with low energy and little to no interest in things that used to give her pleasure. She wondered whether she should restart an antidepressant.

DISCUSSION

What Are Rumination and Obsessions?

While ruminating and obsessing are terms that are commonly used to describe similar patterns of repetitive thinking, they have distinct characteristics. Although they are sometimes used interchangeably with reflecting, pondering, cogitating, or deliberating, they differ substantially from those words in the sense that the latter are adaptive, while ruminating and obsessing are maladaptive, or problematic modes of thinking. More specifically, pondering, cogitating, reflecting, and deliberating facilitate constructive thinking about past events or decisions, which in turn facilitates learning from prior experiences and enhances our behavior. In contrast, ruminating and obsessing lead to a worsening of mood and functioning (Table 1).

Rumination is a passive and repetitive form of thinking that is usually accompanied by a distressing and negative focus on oneself, without leading to problem-solving.[1] Although individuals often begin to ruminate with a desire to understand what has happened and to gain insights into their behavior and circumstances, thus aspiring to self-reflection, the process goes awry, and such thinking often develops into a vicious downward spiral of negative thoughts.[2] Thus, a well-intentioned self-evaluative process that can be adaptive turns maladaptive and self-critical, and self-reflection becomes self-criticism. These ruminative thoughts color how we perceive and think about ourselves and our surroundings, which results in a negative outlook.[3] For example, rumination can lead one to recall and interpret memories as being negative.[3] Moreover, rumination interferes with effective social problem-solving, which adversely impacts the initiation and maintenance of

Clinical Points

- Difficult-to-control negative repetitive thoughts can manifest as ruminations or obsessions.
- Ruminations are passive, negative thoughts that are focused on oneself and one's symptoms of distress, without engaging in active productive problem-solving.
- Obsessions are unwanted intrusive thoughts and ideas that often give rise to related ritualistic behaviors referred to as compulsions.
- Appropriate early identification and intervention (for both ruminations and obsessions) with selective serotonin reuptake inhibitors and/or cognitive-behavioral therapy can positively affect the course and prevent an episode of psychiatric illness.

healthy interpersonal relationships.[3–5] Notably, ruminations can become persistent and pervasive and engender worsening mood and symptoms that culminate in significant impairment.

Obsessions are marked by recurrent and persistently intrusive and unwanted thoughts, images, and urges.[6,7] Obsessive thoughts often involve a fear of contamination, symmetry or order, aggression, sexuality, or religion.[6] Obsessions are often recognized as being excessive and irrational when compared with healthy preoccupations about similar themes. In addition, obsessions are often ego-dystonic, ie, they conflict with a person's self-image, which leads to distress. As a response to obsessions, people often feel driven to perform repetitive behaviors or mental acts, referred to as compulsions, to address or neutralize their obsessions[6] (eg, in response to a fear of contamination, an individual might repeatedly wash their hands). Fortunately, not everyone who experiences obsessions develops compulsive behaviors. Ironically, compulsions increase the occurrence of unwanted thoughts and images, rather than decrease them, which may explain why intrusive thoughts are experienced as persistent and uncontrollable.[6] Obsessions, especially in conjunction with compulsions, are both highly distressing and time-consuming, which interferes with daily life.[8] For example, someone with obsessive-compulsive disorder (OCD) may experience an intense fear of leaving the stove on before leaving their house and repeatedly return to the stove to see if it was turned off. For someone with moderately severe OCD, such a scenario can occupy up to 3 hours before they are able to leave their home.[8]

Thus, while rumination and obsession are both manifestations of negative repetitive thinking, they differ in their focus and emotional context. Rumination is typically tied to negative emotions and experiences, whereas obsessions are characterized by distressing and intrusive thoughts that are often accompanied by compulsive behaviors.

What Conditions Are Associated With Ruminating and Obsessing?

Rumination is most closely associated with major depressive disorder (MDD), and indeed, much of the research on rumination has been carried out in those with MDD. Rumination increases and perpetuates depressive symptoms, and it predicts the likelihood of developing and even affecting the course of depression.[1,9] However, accumulating evidence suggests that rumination is a transdiagnostic phenomenon, occurring in nearly all psychiatric disorders, including bipolar disorder, anxiety disorders, eating disorders, autism spectrum disorder, and even psychotic disorders.[10–12] In fact, rumination plays a role in the onset and maintenance of a bevy of disorders, eg, posttraumatic stress disorder, eating disorders, alcohol use disorder, substance use disorders (SUDs), and bipolar disorder.[13–15] Therefore, rumination may well predispose to illness, as well as perpetuate symptoms and affect treatment outcomes.[15] Notably, rumination can also occur in those who have not yet been diagnosed but who have subclinical symptoms, for example, low mood.[16]

Obsessions are most frequently observed in individuals with OCD and obsessive-compulsive personality disorder. In addition, obsessions are common in those with schizophrenia-spectrum disorders, with upwards of 30% of this population experiencing obsessive-compulsive symptoms.[17] The obsessions in individuals with schizophrenia most often consist of intrusive recurrent thoughts or images about contamination and harming others.[18] Obsessions are also prevalent in postpartum women, with almost 40% of postpartum women experiencing subclinical OCD-related symptoms and roughly 11% meeting criteria for OCD.[19] Most commonly, these women experience obsessions related to contamination and aggression.

Finally, it has been argued that some people with Tourette syndrome (TS) exhibit mildly to moderately severe obsessions and compulsive behaviors and that their tics are a compulsive response to obsessive thoughts.[20–22] Further, "pure" OCD and TS-related OCD appear to have distinct characteristics in the content of the obsessions. While those with OCD appear to be more occupied with obsessive thoughts about dirt and germs, individuals with TS-related OCD more often manifest religious, sexual, and aggressive obsessions.[20,21] In addition, TS-related OCD is often experienced as sudden, short-lived, and ego-syntonic and not necessarily related to anxiety. Pure OCD, on the other hand, is often related to anxiety; it is often lifelong, ritualized, and persistently ego-dystonic.[22]

What Factors Predispose People to Develop Rumination and Obsessions?

Rumination, according to the framework of the response styles theory (RST) by Nolen-Hoeksema,[4] is trait-like, meaning that some individuals are more prone

Table 1.
Thinking Patterns Associated With Ruminations and Obsessions

Symptom	Ruminations	Obsessions
Characteristics	• Thinking repeatedly about the same thoughts or problems, which are often related to distress, regrets, or negative emotions. • More commonly, ruminations cause a cycle of negative thinking that contributes to feelings of depression and anxiety. • In some cases, ruminations can cause a cycle of positive self-focus that may contribute to grandiose thinking. • Ruminations focus on past experiences. • Ruminations inhibit changes in behavior.	• Recurrent, intrusive, and distressing, thoughts, or urges (eg, my hands are dirty). • Common themes: (1) Fear of contamination (2) Thoughts of an aggressive/harmful, sexual, or religious nature (3) Symmetry • In response to obsessions, compulsive behaviors are often performed, or an individual may try to suppress their thoughts.
	"Why did I do that?"	"I touched the front door handle. My hands are dirty, and I must get rid of the germs on my hands … otherwise I will become very sick."

to ruminate in response to a low mood.[1] Furthermore, the ruminative response is typically acquired in childhood, resulting from unhealthy parenting styles (eg, overcontrolling, overcritical, or the modeling of a passive emotional coping style), adverse environmental experiences (eg, sexual or emotional abuse), and learned sociocultural expectancies that are related to emotional regulation.[4,23] In fact, rumination may be more frequent in females due to sociocultural emotional processing styles.[14] The RST proposes that rumination intensifies and prolongs illness as well as triggers different psychopathologies. In line with this, adolescent girls with a tendency to ruminate are at greater risk for developing depression, a SUD, and eating disorders such as bulimia nervosa.[1]

In addition, twin studies suggest that biological factors also increase the likelihood to ruminate. The heritability of rumination has been estimated to be 20%–40%.[23] Furthermore, a specialized brain network called the default mode network (DMN) has been implicated in rumination.[24] In general, the DMN has been associated with processing information about oneself and others, which in turn allows a person to reflect, mentalize, and empathize.[25] Individuals who ruminate demonstrate abnormal activity and connectivity in the DMN, possibly leading to impairments in how they understand themselves and others and, in turn, to impairments in functioning, especially interpersonal functioning. Notably, while the DMN is implicated in rumination, researchers are beginning to explore how the interplay between the DMN and other brain networks subserves and maintains rumination or inhibits rumination, including the salience and executive networks.[26]

Obsessions appear to arise from disparate environmental and biological factors than those associated with rumination. According to cognitive-behavioral theories, OCD originates from misinterpretation of intrusive thoughts and images.[27] Intrusive images or thoughts (eg, "I will drop my baby, and it will fall down the stairs") are actually experienced by most people[28]; however, individuals at risk of developing OCD are more likely to interpret intrusive thoughts as highly immoral and unacceptable and often fear that having an intrusive thought will lead to the undesired action (ie, "thought-action fusion"),[29,30] such that the thought of "dropping the baby" will lead to actually doing so. To prevent the thought from leading to action, individuals often respond with thought suppression or compulsions to prevent the action. However, both suppression and compulsions only reinforce obsessions because they short-circuit the individual's ability to learn that a thought does not necessarily lead to an action.[6] The reason some individuals misinterpret intrusive thoughts may stem from early life experiences; for example, intrusive sexual thoughts in an individual may reflect a history of sexual abuse.[31] The onset of OCD appears to have 2 peaks[32]; roughly three-fourths have an early onset of OCD, with a mean age at onset of 11 years, while one-fourth develop OCD later in life, with a mean age at onset of 23 years. However, age at onset does not affect clinical presentation.[6]

Research into the biological substrates of OCD commonly suggests that there is an abnormal functioning of the frontolimbic and frontostriatal networks.[33] These networks are involved in the altered processing of OCD-relevant stimuli (eg, increased activity to a tilted picture on the wall). In comparison with healthy controls, those with OCD present with hyperactivation of these networks, which may be responsible for exaggerated emotional responses. In addition, hyperactivity in the frontal network suggests an enhanced effort to suppress the heightened emotional response.[33]

How Can Rumination and Obsessions Be Managed in Primary Care Settings?

In the case of rumination, a person who is primarily ruminating should raise concerns for a depressive episode or an impending depressive episode. While ruminations are transdiagnostic and are evident in most psychiatric disorders, ruminations in the setting of low mood are particularly suggestive of a depressive episode or the risk for one. That said, ruminations can also affect the course

of other psychiatric illnesses, with or without comorbid depression, and should prompt monitoring for worsening of any psychiatric illness.

Currently, there are no approved treatments specifically for ruminations. However, since rumination is frequently a response to low or depressed mood, interventions that address depressed mood can and should lead to improvements in rumination. Although such treatment does not address the tendency or predisposition to ruminate, it does provide less reason to ruminate. Also, in line with the RST, researchers have successfully distracted participants (who had a tendency to ruminate) from engaging in rumination by directing their thoughts externally to imagine visual or perceptual features of objects and the environment.[34,35] Interestingly, in 1 study, individuals who spent time walking in nature reported less rumination than those who spent time walking in an urban environment, suggesting that there is some benefit to spending time in nature for those with a tendency to ruminate.[36]

Watkins and coworkers[37,38] developed a new form of therapy to address the tendency to ruminate, called rumination-focused cognitive-behavioral therapy (RF-CBT) for depression, which attempts to direct individuals to engage in productive self-reflection as opposed to rumination by modifying their beliefs around what constitutes productive versus destructive self-reflection, with a particular focus on the thought process. Of note, while acceptance and commitment therapy, which has a strong evidence base for the treatment of symptoms of depression, also attempts to address process, it conceptualizes rumination as an avoidance mechanism or escape from affect, and the therapy is focused on decreasing avoidance.[39] While both forms of therapy focus on process, RF-CBT is focused on changing metacognitive beliefs about the utility of rumination and recognizing it as a nonproductive form of self-reflection.

Mindfulness practices and mindfulness-based cognitive therapy (MBCT) are also being explored to address rumination, motivated by data that show that individuals who engage in mindfulness practices show less of a tendency to ruminate.[40] In addition, mindfulness alters connectivity and decreases activity in brain networks that underlie rumination, the DMN.[41–44] Finally, there is some evidence that short-term use of adjunctive antipsychotics, primarily atypical antipsychotics, may be beneficial in those with treatment-resistant MDD who have severe ruminations.[45]

With regard to obsessions, first-line treatments for OCD include exposure response prevention (ERP) therapy and CBT,[46–48] as well as use of selective serotonin reuptake inhibitors (SSRIs),[46,49,50] with the best response coming from combined treatment. ERP is the "gold standard" in therapies for OCD, and it focuses on providing exposure to feared stimuli and breaking the cycle of compulsions or rituals in response to intrusive thoughts and images that might be triggered by such stimuli.[51] CBT for obsessions is focused on challenging interpretations of intrusive thoughts and images; it is sometimes better tolerated than is ERP.[52]

Pharmacotherapy for OCD consists primarily of SSRIs, often at doses that are much higher than those typically used for depression.[46,49] Additionally, mitigation of OCD symptoms from the use of SSRIs takes longer than does response of SSRIs for depression, with an adequate trial noted to take between 8 and 12 weeks.[49]

What Happened to Ms C?

Ms C's repetitive and negative thinking was self-critical, and a response to her depressed mood, consistent with ruminations and the onset of a depressive episode. She was restarted on the antidepressant (fluoxetine) that she had used years earlier. In addition, she received low-dose quetiapine to help her sleep and ruminate less. Improved sleep translated into less time spent ruminating, which had been especially problematic at night. Ms C also entered therapy with a therapist who specializes in MBCT, which she found helpful for staying focused in the present and being less judgmental and self-critical.

CONCLUSIONS

Patients in primary care settings often report having difficulty controlling their thoughts or having repetitive thoughts that are adversely affecting their emotional well-being and ability to function. These repetitive maladaptive thoughts might be ruminations or obsessions. Proper treatment relies on distinguishing between these 2 types of repetitive negative thoughts and initiating proper treatment.

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Author Affiliations: Department of Psychiatry, Massachusetts General Hospital, Boston, Massachusetts (Ghaznavi, Schiewe, Stern); Harvard Medical School, Boston, Massachusetts (Ghaznavi, Stern); Faculty of Psychology and Neuroscience, Maastricht University, Maastricht, The Netherlands (Schiewe).

Corresponding Author: Sharmin Ghaznavi, MD, PhD, Department of Psychiatry, Massachusetts General Hospital, 55 Fruit St, Boston, MA 02114 (sghaznavi@mgh.harvard.edu).

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