Clinical Case Conference

From the University of Pittsburgh School of Medicine

Diagnosis and Treatment of Postpartum Obsessions and Compulsions That Involve Infant Harm

Robert Hudak, M.D.

Katherine L. Wisner, M.D., M.S.

Obsessive-compulsive symptoms in the postpartum period often include intrusive thoughts of harming the infant and rituals that result in avoidance of the baby. The differential diagnosis of women who develop these symptoms includes postpartum major mood disorders, obsessive-compulsive disorder, and psychosis with infanticidal thoughts. The treatment of the most common diagnoses, mood dis-

orders and obsessive-compulsive disorder, includes serotonergic drugs, psychoeducation to help the patient understand that she is highly unlikely to harm her infant, and exposure with response prevention therapy. This intervention involves exposure of the patient to the feared situations, which are usually related to infant care, while simultaneously preventing the compulsive rituals.

(Am J Psychiatry 2012; 169:360-363)

Case Presentation

"Mrs. M," a 32-year-old white woman who had given birth to her first child 9 weeks earlier, presented to the psychiatric emergency department with severe anxiety and obsessive thoughts about harming her baby. The pregnancy had been uncomplicated, and Mrs. M delivered a healthy boy, whom she was bottle feeding. Mrs. M was referred by her obstetrician after reporting that she was unable to care for her infant. Her presenting complaint was severe anxiety that began a few days postpartum. She had difficulty falling asleep and was not eating regularly. She was also afraid to be alone with her son because of her terrifying thoughts. She reported obsessions about stuffing her baby into a microwave oven. The sight of an oven triggered the fear that she was unknowingly "sizing it up to see if her baby would fit." She cried when these thoughts became particularly intense. Mrs. M had similar thoughts about forcing her husband into a microwave oven, which were even more frightening, since she realized that it was physically impossible. The experience of being unable to stop worrying about something she knew was impossible made her feel that she was "going crazy" or that she would become "the next Andrea Yates." Mrs. M also had visual obsessions in which she could see herself tearing the bloody cornea from her baby's eye and holding it in her hand. Before presenting at the emergency department, she had asked her mother-in-law to take care of her son because of her fears about harming him. However, she denied any intent to harm him.

Mrs. M's only psychiatric history was panic disorder in the remote past. She had responded well to paroxetine and had not taken any medication in the 2 years before the index pregnancy.

The psychiatrist who evaluated Mrs. M in the emergency department reported that she had no delusions or hallucinations. He concluded that she had a low risk of

harm to herself or to her baby because her fears about harming the infant were obsessions (i.e., ego-dystonic without evidence of psychosis) and because she had no homicidal or suicidal ideation. The assessment that she was at low risk of harming her baby was not shared by the patient or her family, who remained very worried about this possibility. The diagnosis given to Mrs. M in the emergency department was generalized anxiety disorder with panic attacks, with a differential diagnosis of obsessive-compulsive disorder (OCD), and it was noted that the patient did not meet criteria for a major depressive episode. This assessment overlooked the patient's primary concern—namely, her obsessions—which resulted in a delay in implementing a more focused intervention.

The emergency department staff referred Mrs. M to an intensive outpatient program for treatment of mood and anxiety disorders. She was treated with citalopram (titrated to 40 mg/day) to target her mixed anxiety and depressive symptoms. She continued to report intrusive thoughts and her functioning remained impaired, although her anxiety and depression improved with citalopram treatment.

After an additional 3 weeks of ongoing evaluation, Mrs. M was given a definitive diagnosis of primary OCD and was referred to our specialized OCD intensive outpatient program for targeted treatment. She received education about OCD and its common manifestations during the postpartum period. This included a discussion about persons with obsessions not acting on these thoughts and using rituals, including avoidance, to decrease the associated anxiety. Mrs. M reported that this psychoeducational session was one of the most helpful things that contributed to her recovery. She was relieved to know that she did not have a psychotic disorder, that the risk of her harming her child was negligible, and that the illness occurred in other postpartum women.

Mrs. M participated in the OCD program 2 days a week for 12 weeks. Her citalopram dosage was increased to

This article is featured in this month's AJP Audio, is the subject of a CME course (p. 441), and is an article that provides Clinical Guidance (p. 363)

60 mg/day. She had been reluctant to accept exposure with response prevention treatment until she understood that persons with obsessional thoughts do not act on them. She participated in a series of exposures that were increasingly difficult. She was assigned to watch medical programs on television showing ill or injured people, which she had been avoiding because they were anxiety triggers. She was asked to hold a butcher's knife in her hands while looking at a photograph of her son. She progressed to staring at the gas grill and her oven for increasing lengths of time. Eventually, she turned both appliances on for 5 minutes at a time without being allowed to check to ensure that she had not unknowingly placed the baby inside. Exposure with response prevention treatment resulted in a marked decrease in intrusive thoughts as well as avoidant behaviors. Toward the end of treatment, she was given her most difficult assignments, which included imaginal exposures in which she was riding a carousel and had to imagine that she threw her son off. She was able to complete these exposures with significant decreases in anxiety. Mrs. M was discharged to outpatient treatment, in which she continued to receive medication and maintenance exposure with response prevention. Her citalopram dosage was once again increased, to 80 mg/day, to target mild residual obsessions, without major side effects.

Two years later, Mrs. M reported occasional low-level intrusive thoughts, which she was able to control and which had no impact on her functioning. Her son was developing normally. She continued to do well, and 5 years after the initial onset of OCD symptoms, she and her husband decided to have another baby. They were given a full discussion of the risks and benefits of medication during pregnancy, and Mrs. M decided to maintain her citalopram at 80 mg/day. During the 19th week of her pregnancy, the Food and Drug Administration released a warning about citalopram dosages over 40 mg/ day. Mrs. M decided to maintain her medication after obtaining normal results in an ECG. During the course of her pregnancy, her OCD symptoms did not worsen. She delivered a healthy girl via cesarean section, and 3 days postpartum, she began to experience obsessions of harm identical to those of the index pregnancy. She immediately informed her therapist and psychiatrist. They provided support to handle the obsessive thoughts as she had done previously, and she was encouraged to do relaxation and mindfulness exercises. She was also given a brief course of clonazepam, at 0.5 mg, for sleep and as needed for anxiety. Within 1 week, she reported significant improvement in anxiety and intrusive thoughts. Two weeks later, she reported that her OCD symptoms remitted.

Discussion

The first 3 months after delivery is associated with an increased risk for the onset of psychiatric disorders, particularly mood disorders (1). While significant attention has been given to postpartum depression in both the scientific and popular literature, less has been written about postpartum-onset anxiety disorders such as OCD. In one study, half of women with OCD reported that the birth of a child was the precipitant of the illness (2); similarly, in another study, half of women with preexisting OCD reported

a worsening of symptoms in the postpartum period (3). Abramowitz et al. (4) reported that 87% of women presenting to a perinatal mood disorders clinic had intrusive, obsessive-like thoughts, with half of those women experiencing clinically significant obsessions. These observations indicate that OCD and obsessive-compulsive symptoms may be of greater prevalence during the perinatal period than previously recognized (5).

Mrs. M's case illustrates many important points in the assessment, differential diagnosis, and treatment of postpartum women. The rapid onset of anxiety and obsessions are typical in postpartum-onset OCD (6). Case series have reported mean times of 2-4 weeks for onset of OCD symptoms after birth (7). Intrusive thoughts are common in women during the immediate postpartum period, both as a manifestation of OCD and as a symptom of major depression. Women who have obsessions and compulsions may continue to experience disabling symptoms after resolution of depression, and the course of both symptom sets should be followed for treatment response. In the postpartum period, approximately 90% of women report mild, transient intrusive thoughts less intense than but similar in content to those reported by women with postpartum OCD (8).

Differential Diagnosis

In a study of women with postpartum major depression (9), 57% reported obsessional thoughts concerning harm to their babies, and the majority had checking compulsions (that they had not harmed their babies, that nothing terrible had happened). In new mothers, checking behavior might be considered adaptive with respect to vigilance about the newborns' welfare; however, in OCD, it is intensified to a degree that compromises the maternal caretaking function (9). In contrast, 39% of women with nonpostpartum major depression endorsed intrusive thoughts or other OCD symptoms (9). However, women (and clinicians) are less likely to recognize these thoughts as commonly occurring postpartum psychiatric symptoms, as the case of Mrs. M illustrates. In perinatal women, clinicians should screen for both depressive and anxiety symptoms, with specific attention to obsessional thoughts (4). The use of tools such as the Yale-Brown Obsessive Compulsive Scale (10) can aid in diagnosis as well as measurement of symptom severity and responsivity over the course of treatment. Information about OCD rating scales is available through the Mount Sinai Obsessive-Compulsive Disorders Treatment Center (http://www.mssm.edu/ research/centers/center-of-excellence-for-ocd). Information about postpartum OCD is also available from the International OCD Foundation (www.ocfoundation.org/EO_ Postpartum.aspx).

Phenomenological differences between postpartumonset OCD and OCD that develops independent of childbearing have been reported. Women with postpartum OCD have a higher rate of aggressive obsessions than women with nonpostpartum OCD (9, 11), such as obsessions about causing harm or having already caused harm to their babies. The severity of symptoms does not differ between women with postpartum OCD and those with nonpostpartum OCD (2), and insight into OCD appears to be preserved in women with postpartum OCD (11).

DSM-IV-TR states that obsessions can be "ideas, thoughts, impulses, or images" (p. 457). The distinction between postpartum psychosis with hallucinations and obsessional visual images is particularly relevant, as the postpartum period carries the highest risk for new-onset psychosis in a woman's life (1). Mrs. M recognized her thought about stuffing her husband into an oven (a physical impossibility) as bizarre and intrusive, and she was highly distressed by the experience of having the thought, which is characteristic of an obsession but not a psychotic process. Mrs. M described her visual images of the bloody cornea as intrusive and frightening, and her experience was that they existed in her "mind's eye" rather than in the physical world. It was not a false sensory perception characteristic of a hallucination. With detailed questioning of the patient, the diagnosis of a visual or other unusual obsession can be determined by assessing its intrusive nature, evaluating for associated compulsions or rituals, and ruling out delusions and hallucinations. The compulsions may not manifest as an active ritual but may occur as avoidance of the feared situation (harming the newborn) by asking others to care for the baby or avoiding behaviors or objects associated with obsessions (avoiding bathing the baby, removing the microwave from the kitchen).

Treatment

The treatment of postpartum OCD has not been studied extensively, and therefore it is conducted in the same manner as for general OCD, with adaptations appropriate to the postpartum context. The treatment is twofold, consisting of pharmacotherapy and cognitive-behavioral therapy. Of the classes of antidepressants available for use in major depression, only selective serotonin reuptake inhibitors and clomipramine, a tricyclic antidepressant, are recommended for first-line use in OCD, and at higher dosages than are commonly used for depression (12). Mrs. M responded fully to a trial of citalopram at 80 mg/day.

Studies of the use of exposure with response prevention specific to postpartum OCD are also lacking. There is no theoretical basis for predicting that postpartum OCD should respond differently than non-childbearing-related OCD, and it is recommended that typical exposure with response prevention protocols regarding the structure of the therapy be followed (13). Because subclinical obsessions also occur in postpartum women who do not have an OCD diagnosis, a symptom-focused rather than a disorder-focused approach is preferable pending further research (13). It is important to provide education about the nature of intrusive thoughts before initiating therapy. Psychoeducation enabled and motivated Mrs. M to accept

exposure with response prevention, and she described it as the most important intervention she experienced.

Conclusions

Education of both women and health care providers about the occurrence and nature of intrusive thoughts during childbearing should be expanded. Women with postpartum-onset obsessional thoughts regarding harm toward their babies are highly distressed and are reluctant to reveal these thoughts to their families and to health care professionals. They are more likely to discuss anxiety or depressive symptoms than to describe their intrusive thoughts, and this may result in suboptimal treatment. To design appropriate interventions, mental health care professionals must differentiate obsessions from actual thoughts of or intent to harm the infant (or others). Women with OCD without psychosis or a severe personality disorder do not have an elevated risk of aggressive harm to their infants (13, 14). Increased awareness of postpartum OCD will facilitate appropriate referrals and treatment for affected women.

Received May 2, 2011; revisions received Aug. 13, Aug. 25, and Sept. 12, 2011; accepted Sept. 19, 2011 (doi: 10.1176/appi. ajp.2011.11050667). From the Departments of Psychiatry and Obstetrics and Gynecology, University of Pittsburgh School of Medicine; and Western Psychiatric Institute and Clinic, University of Pittsburgh Medical Center, Pittsburgh. Address correspondence to Dr. Wisner (wisnerkl@upmc.edu).

Dr. Hudak has received royalties from Cambridge University Press. Dr. Wisner has served on Eli Lilly's advisory board and has received donated medication and placebo from Novogyne (Novartis) for an NIMH-funded randomized trial.

The authors thank Ms. Andrea Confer for assistance with manuscript preparation.

References

- Munk-Olsen T, Laursen TM, Pedersen CB, Mors O, Mortensen PB: New parents and mental disorders: a population-based register study. JAMA 2006; 296:2582–2589
- Maina G, Albert U, Bogetto F, Vaschetto P, Tavizza L: Recent life events and obsessive compulsive disorder (OCD): the role of pregnancy/delivery. Psychiatry Res 1999; 89:49–58
- Labad J, Menchón JM, Alonso P, Segalàs C, Jiménez S, Vallejo J: Female reproductive cycle and obsessive-compulsive disorder. J Clin Psychiatry 2005; 66:428–435
- Abramowitz JS, Meltzer-Brody S, Leserman J, Killenberg S, Rinaldi K, Mahaffey BL, Pedersen C: Obsessional thoughts and compulsive behaviors in a sample of women with postpartum mood symptoms. Arch Womens Ment Health 2010; 13:523–530
- 5. Chaudron LH, Nirodi N: The obsessive-compulsive spectrum in the perinatal period: a prospective pilot study. Arch Womens Ment Health 2010; 13:403–410
- Grigoriadis S, Romans S: Postpartum psychiatric disorders: what do we know and where do we go? Curr Psychiatry Rev 2006; 2:151–158
- Brandes M, Soares CN, Cohen LS: Postpartum onset obsessivecompulsive disorder: diagnosis and management. Arch Womens Ment Health 2004; 7:99–110
- 8. Fairbrother N, Woody SR: New mothers' thoughts of harm related to the newborn. Arch Womens Ment Health 2008; 11:221–229

- Wisner KL, Peindl KS, Gigliotti T, Hanusa BH: Obsessions and compulsions in women with post-partum depression. J Clin Psychiatry 1999; 60:176–180
- Storch EA, Larson MJ, Price LH, Rasmussen SA, Murphy TK, Goodman WK: Psychometric analysis of the Yale-Brown Obsessive-Compulsive Scale Second Edition Symptom Checklist. J Anxiety Disord 2010; 24:650–656
- Uguz F, Akman C, Kaya N, Cilli AS: Postpartum onset obsessivecompulsive disorder: incidence, clinical features, and related factors. J Clin Psychiatry 2007; 68:132–138
- Ninan PT, Koran LM, Kiev A, Davidson JR, Rasmussen SA, Zajecka JM, Robinson DG, Crits-Christoph P, Mandel FS, Austin C: High-dose sertraline strategy for nonresponders to acute treatment for obsessive-compulsive disorder: a multicenter doubleblind trial. J Clin Psychiatry 2006; 67:15–22
- 13. Abramowitz JS, Schwartz SA, Moore KM, Luenzmann KR: Obsessive-compulsive symptoms in pregnancy and the puerperium: a review of the literature. J Anxiety Disord 2003; 17:461–478
- 14. Sit D, Rothschild AJ, Wisner KL: A review of postpartum psychosis. J Womens Health (Larchmt) 2006; 15:352–368

Clinical Guidance: Differential Diagnosis and Treatment of Obsessive Thoughts of Harming a Newborn

Hudak and Wisner describe women with intrusive thoughts of harming their infants and rituals that result in avoidance of their babies. Differential diagnosis of women who develop these symptoms includes postpartum major mood disorders, obsessive-compulsive disorder, and psychosis with infanticidal thoughts. Rapid onset in the postpartum period of anxiety and obsession is common. Insight into the obsessive unreality of rituals to avoid harm is a key diagnostic feature. Treatment includes serotonergic drugs, psychoeducation to help the woman understand that she is unlikely to harm her infant, and exposure with response prevention therapy.

Am J Psychiatry 169:4, April 2012 ajp.psychiatryonline.org **363**