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Inside

In This Issue

This issue of the *Residents' Journal* focuses on the topic of women's mental health and wellness. Teofilo Matos Santana, M.D., presents data on psychiatric comorbidities in breast and gynecologic cancers. Jessica L. Coker, M.D., examines suicide risk during pregnancy and the postpartum period and provides information on prevalence, risk factors, and management. In one case report, Meesha Ahuja, M.D., discusses postpartum psychosis in a young woman with a history of bipolar disorder, emphasizing the need for psychiatrists to be cognizant of risk factors in the perinatal population. In another case report, Tara Malekshahi, M.D., describes a woman with obsessive-compulsive disorder before, during, and after pregnancy whose symptoms decreased with sertraline and weekly cognitive-behavioral therapy sessions. In a review article, Pochu Ho, M.D., discusses comorbid psychiatric disorders during menopause, outlining underlying mechanisms and treatments. Lastly, GenaLynne C. Mooneyham, M.D., M.S., and Lorraine Myers, M.D., present a treatment in psychiatry article on the complex psychiatric disorder of anorexia nervosa and provide important data on evaluation and management.

Editorial

Promise and Progress in Women's Mental Health

Kathleen Mary Patchan, M.D.
Associate Editor

Women's mental health is a burgeoning field that offers countless opportunities for trainees. It requires a keen curiosity about the interplay between genetics, hormonal changes, psychosocial stressors, and gender roles that influence how psychiatric illness manifests in women.

Our fundamental understanding of women's mental health continues to evolve. Historically, women with schizophrenia develop the disorder at a later age and require fewer antipsychotics than men. Women are more likely to be diagnosed with unipolar mood disorders, anxiety, and somatic complaints. This may be related to the complex interplay of genes and environment. For example, estrogen receptors, which are found in the prefrontal cortex and the limbic system, may increase the transmission of serotonin and noradrenaline. Decreases in estrogen may contribute to women developing depression later in life.

Women are more likely to be affected by violence, abuse, and poverty than men. An estimated 6% of women have been victims of intimate partner violence, which can worsen depression, anxiety, posttraumatic stress disorder, and substance abuse (1). An estimated 36% of women will have experienced rape, physical violence, or stalking over their lifetime (2). These risks worsen during pregnancy, which can lead to adverse birth outcomes and postnatal behavioral problems. This illustrates that women's mental health impacts the lives of successive generations.

Population-based studies have also advanced the field. The Women's Health Initiative examined chronic illness and quality of life in more than 160,000 postmenopausal women over a span of 15 years (3). In 1994, the National Institutes of Health (NIH) established a multisite epidemiologic study, the Study of Women's Health Across the Nation, to examine more than 3,300 women in their 40s and 50s (4). The Women's Health Initiative Memory Study investigated the impact of hormone replacement therapy on memory loss (5). Since 2008, the NIH has dedicated an estimated $75 million to $100 million annually to women's mental health (personal communication with Setareh Kamali, Public Affairs Specialist, NIH, September 10, 2014). This represents 3%–5% of all NIH funding for mental health. Given the roles that women play—as mothers, daughters, sisters, domestic partners, and productive members of society—the field is certainly deserving of more resources.

Our fundamental understanding of women's mental health continues to evolve.

Women's mental health fellowships are proliferating throughout the country. Fellowships exist at the Brigham and Women's Hospital, Brown University, and New York University, among others. The Association of Women Psychiatrists offers professional development, mentorship, and scholarships. Residents are being recruited to answer pertinent clinical and health services research questions, ranging from elucidating hormonal differences that contribute to psychopathology to developing collaborative care to improve prenatal care.

It is my hope that this issue fosters residents' curiosity and encourages them to become better clinicians, researchers, and advocates in the field of women's mental health.

Dr. Patchan is a fourth-year resident at the University of Maryland/Sheppard Pratt Psychiatry Residency Program in Baltimore. Dr. Patchan is also an Associate Editor of the American Journal of Psychiatry Residents' Journal.

This editorial is dedicated to the female psychiatrists, Drs. Ann Hackman, Stephanie Knight, and Beverli Goldberg, who have served as role models during the author's residency.

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Psychiatric Comorbidities in Breast Cancer and Gynecologic Malignancies

Teofilo Matos Santana, M.D.

The American Cancer Society estimates that one in four deaths in the United States are due to cancer, and the lifetime probability of women being diagnosed with an invasive cancer is 38%. Cancer death rates have decreased by 20% over the past two decades (1). Over the last 5 years, incidence rates have declined slightly in men but remain stable in women.

Breast cancer is the most common malignancy in women. Among gynecologic cancers, endometrial cancer is the most common, followed by ovarian cancer—the deadliest—and cervical cancer (2). There is an interest in reviewing psychiatric comorbidities in women with these malignancies because of the degree of impairment they have on women's health. The present review discusses psychiatric manifestations of patients' experiences throughout diagnosis, treatment, and recovery from reproductive cancers.

Clinical Vignette

"Lucy" is a 54-year-old woman who arrived for her third chemotherapy session for ovarian cancer. She had written a letter to her doctor stating, "Chemo is not working; I'm going into a dark pit of despair, right next to the doors of hell." She is tearful and dysphoric. She is also confused, restless, and anxious over anticipating her death and the conflict it will bring to her family. She reports having auditory hallucinations during her first chemotherapy cycle. Her prognosis is poor. Her medications include dexamethasone pre chemo, ifosfamide, and methylphenidate. Psychosomatic service is consulted for recommendations.

Cancer Diagnoses

Breast Cancer

The mean age of women diagnosed with breast cancer is 61 years, and 61% of those women are alive 15 years after diagnosis, representing the largest group of female cancer survivors. Advances in detection and treatment of breast cancer have significantly improved prognosis, with an estimated 89% surviving 5 years postdiagnosis (3). However, there are concerns about the quality of life and high comorbidity of psychiatric disorders in breast cancer patients and survivors.

Major depressive disorder is present in 10%–25% of these patients and affects quality of life, treatment adherence, and outcome (3). The diagnosis causes such an impact that some studies have found that nearly 30% of breast cancer patients report symptoms consistent with acute stress disorder and posttraumatic stress disorder (PTSD). Of note, these estimates are based on symptoms questionnaires rather than clinical diagnosis (4).

The treatment of breast cancer has far-reaching consequences. Treatments can cause menopausal symptoms, impair sexual function, cause infertility, and disrupt body image as a result of chemotherapy, hormone therapy, and surgery (3). Treatment can also cause psychiatric symptoms. In the above vignette, the psychosomatic consult team who saw the patient suspected that ifosfamide was contributing to the patient's confusion and neurotoxicity (5). Amphetamine and dextroamphetamine and intravenous steroids may have caused delirium and accentuated her fears and preoccupations.

In adolescence and young adulthood, breast cancer is one of the most common and more aggressive malignancies (6). Two studies found that even 5 years postdiagnosis, more than one-half of patients reported anxiety, including fears of recurrence (7). Depressive symptoms were also more common in the youngest age group (<35 years), and 39% of young women had major concerns about treatment-induced infertility (7). Pain, weight gain, and menopausal symptoms are also major concerns (6, 7).

Depression, anxiety, fatigue, and sleep disturbance are among the most commonly reported problems experienced by cancer survivors (8). A woman's body image may be affected by either tumor burden or surgery, affecting her self-esteem and mood. Pain and physical inactivity affect the quality of patients' lives. The interruptions of one's social life (e.g., work, education, and role in the family) after diagnosis perpetuate depression. One study found that the prevalence of depression is higher in breast cancer survivors than in patients (8).

Following treatment, the fear of recurrence emerges (9). Levels of anxiety and depression vary, depending on a patient's coping skills, the treatments she receives, the side effects of these treatments, and the stage and prognosis of the malignancy. Karakoyun-Celik et al. (9) found that 19% of women had depression and severe anxiety at least 12 months after completing treatment and in remission.

There is the belief that psychological factors and stress may have carcinogenic effects on breast cancer. However, one study reported that there was no association between Beck Depression Inventory scores before breast cancer diagnosis (10). Another hypothesis is that women's stress and emotional dysregulation produce endocrine and immunologic changes that increase their risk of developing cancer. A few studies have assessed the association between stress and immune factors. One found higher levels of interleukin-6 in ascitic fluid in patients with depression; another found an association between high distress and low natural killer cells (11). A prospective population-based study demonstrated a strong association between depression and mortality in younger women with early-stage breast cancer (12), suggesting that depression may increase a patient's vulnerability to cancer progression.

Endometrial Cancer

Endometrial cancer is the most common gynecologic malignancy, excluding breast

cancer, in developed countries. Women tend to be diagnosed at an advanced age. The gynecologic cancers, including endometrial cancer, dramatically impact women's sexuality, intimacy, and sense of self (13).

Ovarian Cancer

Ovarian cancer is often diagnosed at an advanced stage because there is no screening test (14). It has a poor prognosis, with 5-year survival rates around 40%, and high recurrence. Many patients experience high levels of distress (11), anxiety, and depression. Higher levels of anxiety and depression are associated with younger age, advanced disease, more physical symptoms, and shorter time since diagnosis (11). Survivors report low sexual activity and sexual satisfaction, and the fear of recurrence may continue for years following diagnosis (14).

Cervical Cancer

In contrast to ovarian cancer, cervical cancer is typically seen in younger women. Rates have declined significantly due to effective screening and prevention in the form of human papillomavirus vaccines. The treatment for locally advanced cervical cancer is radiotherapy and chemotherapy, which often carry the burden of side effects and sequelae that affect the emotional state of patients. Kirchheiner et al. (15) investigated the psychological consequences of brachytherapy in patients with locally advanced cervical cancer. Brachytherapy is a procedure that involves inserting a transvaginal applicator, while the patient is under epidural anesthesia, with two fractions applied within 14–20 hours. It may be regarded as an invasive procedure in an intimate and vulnerable body area. Of those who received this treatment in the Kirchheiner et al. study, 30% developed acute stress disorder, and 41% developed PTSD 3 months after treatment. One patient reported, "I can't feel; I don't want to feel my vagina anymore; otherwise the memories come up … this strange thing, deep into my body. It was like having no chance to defend myself against a rape" (15).

Treatment

There is little evidence to support efficacy, tolerability, or superiority of a particular intervention for treatment of anxiety and depression in individuals with these diagnoses. Paroxetine has been shown to be efficacious (3). Fluoxetine has proved to be superior to placebo in reducing depressive symptoms and improving quality of life (16). Sertraline has been shown to improve executive function and quality of life in cancer patients (17).

Psychotherapy is effective in reducing depressive symptoms in women with metastatic breast cancer. Cognitive-behavioral therapy may be the most cost-effective option (16). Mindfulness-based treatments for mood, anxiety, and stress are effective and show good results (18). One meta-analysis found that short-term treatment with yoga improved psychological health in breast cancer patients (19).

Discussion

Breast and gynecologic cancers have a powerful impact on women's mental health and quality of life. A cancer diagnosis is often seen as a death sentence. However, with advances in treatment and improved survival rates, cancer can represent a life sentence. These cancers share the risk of causing significant impairment in women's mental health and psyche, putting women at risk of developing psychological distress, anxiety, and depression. Patients undergo invasive interventions that often involve the removal of organs symbolic of female identity (14), which has physical and emotional ramifications. Many factors, including psychological needs and social support at the time of diagnosis, play a role in the devolvement of psychiatric comorbidities in these women. Additionally, psychiatric comorbidities and psychological distress can impair women's health to such a degree that they can affect treatment adherence and medical prognosis.

Women diagnosed with cancer should be screened for psychiatric disorders and social support. Patients should be counseled thoroughly, screened periodically, and offered a multidisciplinary treatment panel with mental health clinicians and social workers to assist in their recovery. Notably, in the studies reviewed, only few institutions offered counseling or psychiatric referral.

These studies had multiple limitations, including using screening questionnaires rather than structured clinical interviews and validated scales. Nevertheless, the studies captured the psychological struggles and needs of women with cancer. Comparative studies are needed to examine the efficacy and tolerability of treatment in the management of depression and anxiety.

Many patients struggle with the heavy burden of diagnosis and the consequences of cancer treatment. Psychiatric disorders are often underdiagnosed and undertreated in this patient population. Timely interventions are needed to minimize psychological distress and psychiatric symptoms.

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Suicide Risk Assessment During Pregnancy and the Postpartum Period

Jessica L. Coker, M.D.

Evaluation of suicide risk in pregnant and postpartum women can be challenging for psychiatrists. In these situations, there is not one patient but two: the woman sitting in the office and the developing fetus or infant who does not have an independent voice. The psychiatrist must keep both of these patients in mind throughout his or her evaluation. Suicide in this population remains a major public health concern, since the lives of two individuals are at risk. Although maternal mortality from many obstetrical illnesses has decreased, rates of violent deaths attributed to suicide and homicide during the perinatal period (pregnancy and the first year postpartum) remain constant (1). In fact, rates of suicide and homicide among pregnant and postpartum women outnumber the rates for all other indirect and direct causes of death in this population, including hemorrhage, preeclampsia/eclampsia, and amniotic fluid embolism (2). Not only do these violent deaths impact the victim, they pose significant long-term adverse effects for the infant and family (3). For example, suicidal behavior in pregnancy, in particular parasuicide and/or suicide attempts, is hazardous to the unborn fetus, potentially leading to preterm birth or miscarriage (4). As a result, particular considerations need to be adopted when interviewing women during the perinatal period in the emergency department or clinic to complete a thorough suicide risk assessment.

Suicide risk in this population is multifactorial, involving psychosocial predictors, environmental factors, and, most importantly, the presence of mental illness. It is imperative to understand that while many people may see pregnancy and the postpartum period as one of happiness and joy, there are many women who experience substantial psychological distress. As clinicians who routinely work with this population recognize, many women (up to 70%) during the perinatal period experience depressive symptoms, with up to 14%–20% fulfilling diagnostic criteria for major depression (5, 6). The rates for postpartum depression are similar, affecting 10%–22% of adult women and up to 26% of adolescent mothers (7, 8). The purpose of the present review is to examine the literature on the prevalence of suicidal ideation and behavior during the perinatal period, to familiarize providers with risk and protective factors, and to educate providers in performing a thorough suicide risk assessment.

Prevalence

Being pregnant or postpartum does not appear to protect an individual from psychiatric instability. In fact, rates of mental illness in the perinatal period are similar to those in the general population. Suicidal ideation across the perinatal period is comparable to that found in the general population, hovering around 3% when controlling for confounding factors (9, 10). This percentage drastically increases to 35% in pregnant women with a history of mental illness, posttraumatic stress disorder, and/or comorbid substance abuse (11, 12). Numerous questions are raised when observing suicidal ideation and behavior in women at risk for mental illness.

Although perinatal women experience rates of suicidal ideation comparable to rates found in the general population, the current literature demonstrates overall lower rates of suicide attempts and completions among women who are pregnant or postpartum. Sparse literature notwithstanding, pregnant women are hospitalized for suicide attempts at approximately one-half the rate of nonpregnant women (13, 14). However, one study found that postpartum women had a slightly higher rate of hospitalization following an attempt, at approximately 30% the rate of the entire female population (15). Suicide completions during the perinatal period remain the least prevalent and are lower than the national average. According to data published in 2012 from the National Violent Death Reporting System, only 5% of all suicides among reproductive-aged women occurred during the perinatal period, with the majority of these occurring during the postpartum period (16). Specifically, the rate of completed antenatal and postnatal suicide is 2.0–2.77 per 100,000 live births compared with the rate of 6.57 per 100,000 live births among reproductive-aged women (2). There are many hypotheses to explain this decrease, including the responsibility of being a mother, changes in social support, and stigma.

Although these data are reassuring and suggest that pregnancy and the postpartum period are protective factors for suicide attempt and/or completions, it would be premature to assume that these women have lower risk of suicide. Postnatal women who do complete suicide are more likely to use higher degrees of lethality, namely asphyxia or firearms, while all other women are more likely to choose poisoning or blunt trauma (16). Studies on these data are limited because of their sole reliance on death certificates and medical records to document suicide completions and attempts, which likely underestimate actual events. Additional studies are needed to confirm and generalize these results.

Risk Factors

An integral part of medical training is identifying risks, whether of treatment, procedures, or—in the case of psychiatry—for violent behavior, including suicide. It is critical for the psychiatrist to perform an exhaustive suicide risk assessment. It is equally important to know which women are at highest risk for suicide ideation, attempt, or completion. Past psychiatric history remains a significant risk factor for future suicidal behavior. Pregnant and postpartum women with a history of mental illness, comorbid psychiatric illness, and/or con-

TABLE 1. Risk Factors for Suicidal Ideation and Behavior in the Perinatal Population

Factor
Current depressed mood
Past psychiatric history
Previous suicide attempt
Unplanned pregnancy
Single
Age <30 years
Intimate partner conflict/violence
Concurrent substance use disorder

current substance use have significant increased risk for suicidal ideation, and this has been confirmed in multiple studies (9–11). Case in point, according to data from the National Violent Death Reporting System, an estimated 32% of postpartum women who completed suicide had a prior attempt and were more likely to have had depressed mood at the time they committed suicide (16).

Perinatal women who are single or under the age of 30 have higher rates of all suicidal behaviors. In fact, one-half of all suicides during the perinatal period occur among single women (2, 16, 17). Potential confounding factors include unplanned and/or undesired pregnancies, particularly for those who are single. More information is needed to identify whether this risk is independently associated with suicidal behavior (11).

Intimate partner violence is a growing public health concern affecting women's mental health. An estimated 4%–8% of pregnant women are victims of domestic violence (10). Domestic violence, along with decreased social support, has been associated with suicidal behavior in nonperinatal populations. According to data from the National Violent Death Reporting System, intimate partner conflict and/or violence plays an influential role in approximately one-half of suicides occurring in the perinatal period (2, 16)

In contrast, there are many factors that have been shown to be either protective and/or not correlated with suicidal behaviors. A history of spontaneous/therapeutic abortions, maternal complications during labor or delivery, parity, financial difficulty, physical health problems, and relationship problems (other than intimate partner conflict) have not been associated with suicidal behavior (2, 9, 16). Breastfeeding not only facilitates maternal bonding with the infant but may provide potential protection against depression and suicidal behavior, although the scope of this has not been fully investigated (18). A summary of risk factors for suicidal ideation in the perinatal population is presented in Table 1.

Management

The steps needed to treat the perinatal population are similar to those for the general population. According to APA guidelines, psychiatrists must assess suicidal intent and plan in order to determine the ideal treatment setting (19). The patient's safety is of the upmost importance and will dictate whether the patient requires inpatient admission, substance use treatment, outpatient mental health treatment, and/or violence and legal resources. For the maternal population requiring inpatient services, the psychiatrist should discuss the safety of pregnant patients on standard psychiatric floors, versus management on the labor and delivery floor, as well as separation from the infant because most psychiatric units do not allow children. If the risk of suicide is low, outpatient mental health treatment and social support may be sufficient.

Conclusions

Women face unique challenges during their lifetime that can have a significant impact on mental health, especially during pregnancy and the postpartum period. This is a time of hormonal change in addition to changes in sleep patterns, social structure, and stress levels. Women may be at risk for worsening mental illness and suicidal ideation during this period, prompting specialized care and evaluation. While identifying these women poses specific challenges, utilizing the many opportunities for treatment and services available is imperative.

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Case Report

Postpartum Psychosis: A True Psychiatric Emergency

Meesha Ahuja, M.D.

Postpartum psychosis is a rare but serious condition requiring rapid and careful clinical management. The following case report describes a classic presentation of postpartum psychosis detected in the early postpartum period. This case required rapid and thorough management between the psychiatry consultation-liaison team, the primary obstetrics team, the hospital staff, and the inpatient psychiatric facility where the patient was ultimately transferred.

Case

"Miss C" is a 23-year-old G1P1 Caucasian woman with a history of bipolar disorder who delivered a healthy baby girl by an uncomplicated spontaneous vaginal delivery. She has a history of 15–20 prior inpatient psychiatric hospitalizations, with multiple trials of mood stabilizers and antipsychotic medications. While she was pregnant, she had been prescribed olanzapine, but she was often nonadherent with her medication regimen.

Prior to delivery, the patient's mood was stable. However, immediately after delivery, her nurse reported that she "went through a gamut of emotions," ranging from happy to irritable. Given the patient's labile mood and history of bipolar disorder, the primary team requested a psychiatric consult. The consult team saw the patient approximately 8 hours after delivery. At that point, her mood had stabilized to some extent. She described her mood as "tired but happy." She reported feeling fatigued from giving birth and recent lack of sleep. Both she and her boyfriend expressed how excited they were about the birth of their new daughter. Although the patient appeared stable during the consult team's evaluation, recommendations were made to use olanzapine (2.5 mg–5 mg every 4 hours as needed) for anxiety/agitation.

Overnight, the patient's presentation changed dramatically. At approximately 24 hours postpartum, she started pacing the hallway while not fully clothed. She believed she was experiencing toxic shock syndrome and kept saying that she had "clots in [her] uterus." Because of her agitation and disorganized behavior, she was given a total of 7.5 mg of olanzapine over the course of the night.

When the consult team re-evaluated the patient at 32 hours postpartum, she was lying in bed falling asleep. She stated that she was "feeling fine" and that she felt "woozy … like the med [olanzapine] is working." She then closed her eyes, went to sleep, and refused to answer more questions.

Approximately an hour later, the consult team went back to check on the patient. This time she presented as disoriented, confused, disorganized, anxious, delusional, and psychotic. She thought she was at home (rather than in the hospital), she thought it was 4:00 p.m. (although it was 9:30 a.m.), and she thought she was still pregnant (although she had delivered 33 hours prior). She stated, with distress, that she needed to "push the baby."

Given the patient's history of bipolar disorder and her clinical presentation, she appeared to be suffering from an acute episode of postpartum psychosis. She was transferred for inpatient psychiatric hospitalization for further stabilization of her symptoms. Olanzapine was used as a standing medication to treat her psychosis. After 4 days on the inpatient psychiatric unit, her mood swings decreased, her delusions cleared, and she became more organized. Given that the patient planned to breastfeed, the team had a risk/benefit discussion with her regarding the use of olanzapine during lactation. Ultimately, the decision to continue olanzapine was made. The patient was discharged home with the infant in her care and with follow-up outpatient psychiatric services in place.

Discussion

Although postpartum psychosis is not a specific diagnosis in DSM-5, it is a condition that all psychiatrists should be watchful of when working with the perinatal population. For the majority of women, symptoms develop in the first 2 weeks after delivery, often in the very early postnatal period. The earliest symptoms are typically restlessness, irritability, and sleep disturbance. This can rapidly evolve into a depressed or elated mood, disorganized behavior, mood lability, delusions, and/or hallucinations. In extreme cases, there is a risk of suicide and/or infanticide, and hospitalization is required in these cases.

The prevalence of postpartum psychosis is 1–2 per 1,000 childbirths, a rate that is consistent cross-culturally (1). In women with a history of bipolar disorder and/or a prior episode of postpartum psychosis, the rate of postpartum psychosis is 100 times higher (2). The etiology of postpartum psychosis is likely multifactorial. In addition to biological predisposition, it is likely that hormonal factors play a large role, with the abrupt loss of estrogen and progesterone after childbirth a hypothesized contributing factor (2). The most predictive risk factors include a personal and/or family history of postpartum psychosis, a personal and/or family history of bipolar disorder, and primiparity (3). Other possible risk factors include living in a poor socioeconomic neighborhood, giving birth to a female child, delivering by Cesarean section, complications during delivery, low birth weight, perinatal death, and autoimmune thyroid dysfunction (4).

Without treatment, psychosis can last for several months and lead to substantial

functional impairment. With treatment, symptoms resolve within a few weeks. Inpatient hospitalization is often necessary, especially given the risk that the patient poses toward herself and her baby. A physical examination and laboratory studies should be performed to rule out other causes.

Treatment is guided by the clinical picture. Presently, there have been only a few clinical trials addressing specific treatment for postpartum psychosis. Acute treatment usually involves mood stabilizers, antipsychotics, and benzodiazepines. Lithium is commonly used because postpartum psychosis is most closely related to bipolar disorder. Antipsychotics are also frequently used, given that patients often present with symptoms of psychosis, including agitation, delusions and/or hallucinations. Some studies have found hormone replacement (estrogen and/or progesterone) to be beneficial, but presently there is insufficient evidence to recommend for or against hormonal treatment. ECT has also been studied, and the limited evidence available supports its use for postpartum psychosis. Overall, the objective of treatment is to target the presenting symptoms while also aggressively treating insomnia and sleep disruption.

For those with a history of bipolar disorder and/or postpartum psychosis, preventive strategies are warranted (5). Women with a personal history of postpartum psychosis have a 57% chance of experiencing another psychotic episode after a subsequent pregnancy (6). Research on prevention has mostly focused on mood stabilizers, antipsychotics, and hormone therapy. Among women with a history of prior postpartum psychosis, lithium has been shown to decrease the rate of relapse from 50% to less than 22% (7), but there is insufficient evidence to suggest whether it should be started during pregnancy or immediately following delivery. Antipsychotics have also been found to be helpful. In particular, positive results have been reported in a small trial of olanzapine (8). Hormonal treatment has been studied, but presently there is insufficient evidence to recommend its use (7). What is clear is that women with a history of postpartum psychosis and/or bipolar disorder who do not receive prophylactic treatment are at increased risk of postpartum psychosis. More studies are needed to examine the efficacy of prophylactic interventions, including both pharmacotherapies and adjunctive psychosocial therapies.

Conclusions

Postpartum psychosis is rare, but it is a true psychiatric emergency. It is critical to recognize it and to treat it quickly given the risk to the patient and her newborn. Well-established risk factors include a personal and/or family history of bipolar disorder and/or postpartum psychosis. Studies on treatment are limited, but lithium and antipsychotic medications are often effective. As the field progresses, more research is needed to gain a better understanding of how to treat and prevent this condition.

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The author thanks Cynthia Battle, Ph.D., and Neha Hudepohl, M.D.

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Case Report

A Case of Obsessive-Compulsive Disorder in Pregnancy and the Postpartum Period

Tara Malekshahi, M.D.

Obsessive-compulsive disorder (OCD) is a neuropsychiatric disorder characterized by intrusive, unwanted, and recurrent thoughts (obsessions) and/or repetitive ritualistic behaviors (compulsions) (1). Reproductive cycle events increase the risk for onset and exacerbation of OCD in women (2).

The present case report describes a woman with OCD before, during, and after pregnancy. She presented to a New York City hospital clinic for medication management of worsening OCD symptoms and for preconception counseling before having a second child.

Case

"Ms. A" is a 28-year-old Caucasian woman, 11 months postpartum, who has a healthy baby boy. She is married, lives with her husband, and previously worked as a teacher. Her past psychiatric history is significant for OCD and panic disorder. She has never had a psychiatric hospitalization and has no significant medical history.

The patient's OCD symptoms began when she was 21 years old. She had intrusive thoughts that became obsessive when confronted with "everyday events," such as writing a lesson plan. She "obsessed" over word choice, as well as "life-changing events," such as when she got engaged. Hundreds of times each day, she would ask herself, "Should I marry him or should I not?" She did not have any ritualistic or compulsive behaviors.

At age 21, she began supportive therapy, which incorporated elements of cognitive-behavioral therapy (CBT). Her primary care physician prescribed escitalopram. For unclear reasons, she was switched to citalopram after 2 months. Citalopram was titrated to 40 mg daily with adequate clinical efficacy. The patient was adherent with citalopram and psychotherapy until 3 months prior to her first pregnancy. She stopped the medication "cold" because she was "nervous about the effects on the baby."

She described her pregnancy as "hellish." Her anxiety worsened in the setting of pregnancy complications, including frequent urinary tract infections and proteinuria. During her third trimester, she reported "intense" intrusive thoughts about contamination and began washing her hands "excessively" and "cleaning everything" to a point "beyond rationalization."

Immediately postpartum, her thoughts became "so obsessive that they verged on psychotic." She obsessed over cleanliness, and her compulsive cleansing intensified. She began having intrusive thoughts of harming her baby. She had ideas of reference when reading news articles about victims or perpetrators of crime whose names were similar to her own. She was paranoid, believing that some "higher power" was after her, but she stated that "it was a crazy feeling" and she "knew it wasn't real." She denied manic symptoms or suicidal ideation. She was not seeing a psychiatrist but continued weekly supportive therapy with her therapist.

Postpartum experience before evaluation at the outpatient clinic (6 weeks postpartum).

At 6 weeks postpartum, the patient had a psychiatric consultation at another facility where sertraline was recommended. She refused to start any psychiatric medication because she was breastfeeding and feared that her baby would be exposed, despite reassurance that the amount ingested by the infant was small and undetectable in the infant's serum. She continued to see her outpatient therapist.

Nearly 2 months postpartum, her symptoms worsened. With the encouragement of her therapist, she agreed to start sertraline, and she continued to breastfeed.

Beginning 6 months postpartum, the patient obsessed over whether or not she "harmed her son for life" after he was exposed to "strong gas vapors." Her contamination phobia persisted, and she continued to wash her hands hundreds of times during the day and refused to touch her son if "contaminated."

Reproductive psychiatry intake at the outpatient clinic (11 months postpartum).

The patient's OCD was improving while she was receiving sertraline 50 mg daily. She continued to report intrusive thoughts of harming her son, primarily when she was breastfeeding him at bedtime. However, these thoughts decreased in intensity and frequency, and she stated that they intruded when she "considered how long it had been since [she] last had that thought." She denied acting on these thoughts. She coped by putting the baby in his crib, taking breaks from childcare, and seeking support from her husband.

Her contamination phobia persisted; she washed her hands constantly and refused to wear make-up or lotion. She was inconsistent in following up with her therapist and would regularly cancel or reschedule appointments in our outpatient clinic. She refused to increase her daily dose of sertraline because of concerns about her infant's exposure to the antidepressant.

After multiple meetings with the patient and her husband, she agreed to twice-weekly CBT for OCD treatment. She continued to express concern about increasing her sertraline daily dose above 75 mg.

After several months of more intensive outpatient CBT, the patient was doing well and no longer having thoughts of harming her son. She had discontinued breastfeeding, began washing her hands less frequently, and began wearing make-up and using lotion. She preferred to

TABLE 1. Symptoms of Postpartum Obsessive-Compulsive Disorder (OCD) and Postpartum Psychosis

Postpartum OCD Symptoms	Postpartum Psychosis Symptoms
Obsessional thoughts are ego-dystonic: senseless, unwanted, and inconsistent with the person's behavior or personality.	Symptoms are ego-syntonic: consistent with the person's delusional thinking and behavior.
Involve fear of thinking about or engaging in unacceptable behavior. Involve severe anxiety about whether the individual will act on her thoughts, despite low risk. Person engages in excessive avoidance or rituals in order to control her thoughts and ensure that she does not act on them.	Involve confusion, mood lability, agitation, bizarre behavior paranoia, ideas of reference, auditory or visual hallucinations, and loss of reality. Not associated with fears or rituals. Person may be at risk for unpredictable, aggressive behavior.

discontinue sertraline before conceiving her second child.

Discussion

The lifetime prevalence rate of OCD is 2%–3% in the general adult population worldwide, making it one of the more common psychiatric disorders (3). Patients may experience a chronic and deteriorating course if untreated.

Pregnancy and childbirth is hypothesized to precipitate the onset of OCD. In a study by Neziroglu et al. (4), pregnancy was associated with OCD onset more than any other life event.

A few studies have examined the themes of OCD symptoms in patients who experience perinatal onset (3). Common themes include 1) babies becoming contaminated by toxic agents, which results in cleansing rituals; 2) stabbing a child with a knife, which results in avoidance of knives or the infant; 3) demonic possession (ego-dystonic); 4) sexual molestation; and 5) intrusive thoughts (e.g., images of the baby's head cracked and bleeding, thoughts of throwing the baby down a flight of stairs).

Given the importance of child safety, it is critical to distinguish between the symptoms of postpartum OCD and postpartum psychosis, since both may involve thoughts of harming the newborn (3) (Table 1).

Research over the past 30 years suggests that two forms of treatment (use of selective serotonin reuptake inhibitors [SSRIs] and CBT using exposure and response prevention) are effective for OCD symptoms. There is no theoretical basis for predicting that postpartum OCD, as opposed to onset following other stressors, would respond differently to either SSRIs or CBT (3).

Reproductive events increase the risk for onset and exacerbation of OCD in women. Guglielmi et al. (2) suggested that exacerbation during or after pregnancy may increase risk of a repeat exacerbation in subsequent pregnancies and postpartum periods, indicating the presence of potential underlying biological mechanisms in a subset of women.

Conclusions

Women may be at an increased risk for new-onset, recurrent, or exacerbation of OCD symptoms during or following pregnancy (5). The patient in the above case illustrates the importance of rapidly identifying and treating the symptomatic patient during pregnancy and the postpartum period. When severe obsessive thoughts persist over time, they can resemble delusional thinking and, in rare cases, progress to psychosis. It is critically important to differentiate between postpartum OCD versus psychosis to provide appropriate treatment.

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Comorbid Psychiatric Disorders During Menopause

Pochu Ho, M.D.

Menopause is the permanent cessation of menstrual periods or the loss of ovarian function. Menopause may result from a natural process or from surgery, radiation, or chemotherapy. In the United States, the median age of menopause is 52 years (1). As life expectancy continues to increase, approximately one-half of all women will live a third of their lives after menopause. The Stages of Reproductive Aging Workshop defines three reproductive stages as follows:

1. Reproductive stage: from menarche to the beginning of cycle variation.
2. Menopausal transition: increased variability in cycle length, characterized by changes of ≥7 days in the menstrual cycle to the final menstrual period.
3. Postmenopause: after the final menstrual period; however, it is not recognized until 12 months of amenorrhea (2).

Perimenopause is a term that describes the menopausal transition and 1 year after the final menstrual period.

Hormonal Changes

Menopause is characterized by a decline in estrogen production, resulting in marked elevation in follicle-stimulating hormone and luteinizing hormone. The term estrogen refers to three different hormones: estradiol, estrone, and estriol (3). In premenopausal years, estradiol predominates, while estrone becomes the primary estrogen after menopause (3). Circulating androgens also diminish with aging (3).

Perimenopausal and postmenopausal women may experience significant physical and psychological changes. Vaginal dryness and vasomotor symptoms are associated with the decline in circulating estrogen. The American College of Physicians has advised that menopausal women at risk for coronary heart disease may benefit from the cardioprotective properties of hormone replacement therapy (4). Estrogen receptors are also found in the brain, specifically, the prefrontal cortex, hypothalamus, hippocampus, and limbic system, where estrogen is postulated to increase serotonin and noradrenaline neurotransmission (5). Estrogen has been implicated to play a role in mood, cognition, and sleep. It would be easy to recognize the potential of estrogen to treat disorders in these realms.

However, in 2002, the Women's Health Initiative, a multicentered clinical trial and an observational study, announced that estrogen therapy was associated with increased risk of breast cancer, coronary artery disease, stroke, and pulmonary embolism and ended the hormone therapy portion of its study (4). Furthermore, the Women's Health Initiative recommended that estrogen therapy should not be initiated or continued for primary prevention of coronary heart disease. As a result, there was a dramatic decrease in the use of hormone replacement therapy (4). In the decade since the Women's Health Initiative findings were released, the consensus regarding hormone replacement is that the benefits of treating menopausal symptoms (such as vaginal dryness and vasomotor symptoms) must be weighed against the risks on an individual basis (4). Even as more studies are needed to investigate mental disorders in menopausal women, psychiatrists must work closely with gynecologists because untreated mental disorders can contribute to poorer quality of life and general health.

Depressive Symptoms and Depression

According to the 2005 National Institutes of Health (NIH) State of the Science Conference, the most reliable predicators of depression during menopause are personal history of depression, life stress, and general health (1). The report concluded that there was no clear evidence that depression during menopause is directly related to changes in ovarian hormones. However, studies conducted following the NIH report have identified associations between depression and changes in hormones.

In a prospective study of 231 women without a history of depression, Freeman et al. (6) found that these women had a fourfold increased risk for depressive symptoms and more than twofold risk for depression in the menopausal transition (6). Similarly, based on population-based cohort studies, there is increasing evidence that women undergoing menopausal transition are more vulnerable to depressive symptoms or depression than premenopausal and postmenopausal women. The Harvard Study of Moods and Cycles, a prospective cohort study of 460 women without a history of depression, found that women entering perimenopause were more likely to report depressive symptoms and depression compared with those who remained premenopausal (7).

Because of estrogen's postulated role in increasing serotonin neurotransmission, estrogen replacement has been examined as a treatment or an adjunctive treatment for depression. Soares et al. (8) investigated the effects of transdermal 17-beta estradiol or placebo in a randomized controlled trial of 50 perimenopausal women with depression. Women receiving estradiol showed improvement in major depressive disorder symptoms, even after a 4-week washout period. However, in a randomized controlled trial of 87 postmenopausal women with depression, Morrison et al. (9) found that women in both the 17-beta estradiol and placebo groups showed improvement in depression. Currently, there is insufficient evidence to support the use of hormone replacement as a monotherapy for depression.

Only a limited number of studies have examined the effects of antidepressants on perimenopausal and menopause-related depression. In a review, citalopram, escitalopram, and duloxetine were shown to have reduced the symptoms of depres-

sion in open-label trials (10). These agents also reduced some physical symptoms of menopause, such as hot flashes and night sweats. When estrogen therapy was used with citalopram and mirtazapine in open trials, perimenopausal and menopausal women with depression showed high remission rates. Although additional studies are needed, estrogen may have a role as an adjunctive agent in refractory depression.

Anxiety Disorders

Even more than depression, anxiety is closely tied to physiological and somatic symptoms of menopause, such as hot flashes. There are limited data on the effects of estrogen replacement for anxiety. Heikkinen et al. (11) found only modest improvement in anxiety in 419 postmenopausal women who were randomly assigned to four different estrogen regimens. Similarly, there are limited data regarding the effects of antidepressants on anxiety disorders in this population.

Sleep Disorders

Sleep disturbances are closely related to depressive symptoms, anxiety, and vasomotor symptoms. Sleep disorders encompass a variety of disorders, including insomnia, excessive daytime sleepiness, and abnormal movements and behaviors. Obstructive sleep apnea is more prevalent in the postmenopausal population but is often underdiagnosed because women are more likely to have atypical symptoms such as morning headache, fatigue, anxiety, and depression. Orff et al. (12) reported that older women have shorter total sleep time, more stage-2 sleep, less stage-3 and stage-4 sleep, and worse sleep efficiency. The Study of Women's Health Across the Nation, a multicentered community-based longitudinal study, demonstrated that women with lower estradiol levels have higher odds ratios of having difficulties with initiating and maintaining sleep (13).

Cognition

The postulated role of estrogen in cognition is complex. Estradiol decreases free radicals by increasing antioxidants, thus protecting mitochondrial DNA from oxidative damage (5). In animal models, estrogen also promotes neuronal plasticity (5). Based on animal studies and epidemiological data, estrogen replacement was thought to be neuroprotective. However, the Women's Health Initiative Memory Study showed that women without dementia over age 65 were more likely to develop dementia in the group randomly assigned to conjugated equine estrogen and progestin than those assigned to placebo (14). In contrast to conjugated equine estrogen, other estrogen formulations, such as transdermal estradiol, may more closely approximate the premenopausal state (15). Furthermore, synthetic progestins, such as those used in the Women's Health Initiative Memory Study, have been shown to cause deleterious effects on cognition (16). Currently, there is insufficient evidence to support the use of hormone replacement to prevent dementia. An ongoing multicenter trial, the Kronos Early Estrogen Prevention Study–Cognitive and Affective Study, is under way to address some of the shortcomings of previous studies (15).

Sexual Dysfunction

Similar to sleep disorders, sexual dysfunction encompasses a number of different conditions with varying symptoms. DSM-5 further distinguishes certain female-specific sexual dysfunctions. These include female orgasmic disorder, female sexual interest/arousal disorder, and genito-pelvic pain/penetration disorder (17). Sexuality is affected by many factors, which include changes in circulating hormone, decline in physical health, chronic conditions, medications, education, availability of a partner, and comorbid mental illnesses. Epidemiological data show that sexual dysfunction is more common in older women. A cross-section study of 2,207 women in the United States aged 30 to 70 and in stable relationships showed that menopausal women have a higher prevalence of low sexual desire than premenopausal women (52.4% versus 26.7%) (18).

A Cochrane review of hormone therapy for sexual function in perimenopausal and postmenopausal women examined 27 randomized controlled trials (19). The review concluded that estrogens alone or with progesterone had small to moderate benefit for symptomatic or early postmenopausal women compared with placebo. Tibolone, a synthetic hormone with estrogenic, progestogenic, and androgenic properties, and raloxifene and bazedoxifiene, selective estrogen receptor modulators, had little or small benefit for sexual function. In another Cochrane review, randomized controlled trials of testosterone with conventional hormone replacement compared with conventional hormone treatment alone for sexual function were evaluated (20). This review found that adding testosterone to a hormone therapy regimen has significant beneficial effects on sexual function. However, long-term use of testosterone for sexual dysfunction is not supported, nor is it approved by the Food and Drug Administration. The risks of acne, virilization, hirsutism, and cardiovascular complications must be considered with androgen replacement.

Conclusions

Presently, there is insufficient evidence to treat depression, anxiety, cognitive changes, sleep disorders, and sexual dysfunction in perimenopausal and menopausal women differently from the general population. However, menopausal transition and menopause have been shown to be particularly vulnerable times for women to develop these conditions. Additional research on underlying mechanisms and treatments are needed and ongoing.

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Treatment in Psychiatry

Complications of Anorexia Nervosa: Management of Acute Gastric Distention

GenaLynne C. Mooneyham, M.D., M.S.
Lorraine Myers, M.D.

Anorexia nervosa is a condition that house officers may frequently encounter on their psychiatric inpatient units. However, little training is available, generally speaking, for psychiatry residents on the management of potential complications found in patients with anorexia nervosa. The present treatment in psychiatry article highlights the case of a woman with anorexia nervosa who experienced acute gastric distention and anasarca in the setting of severe protein deficiency.

Evaluation and Management

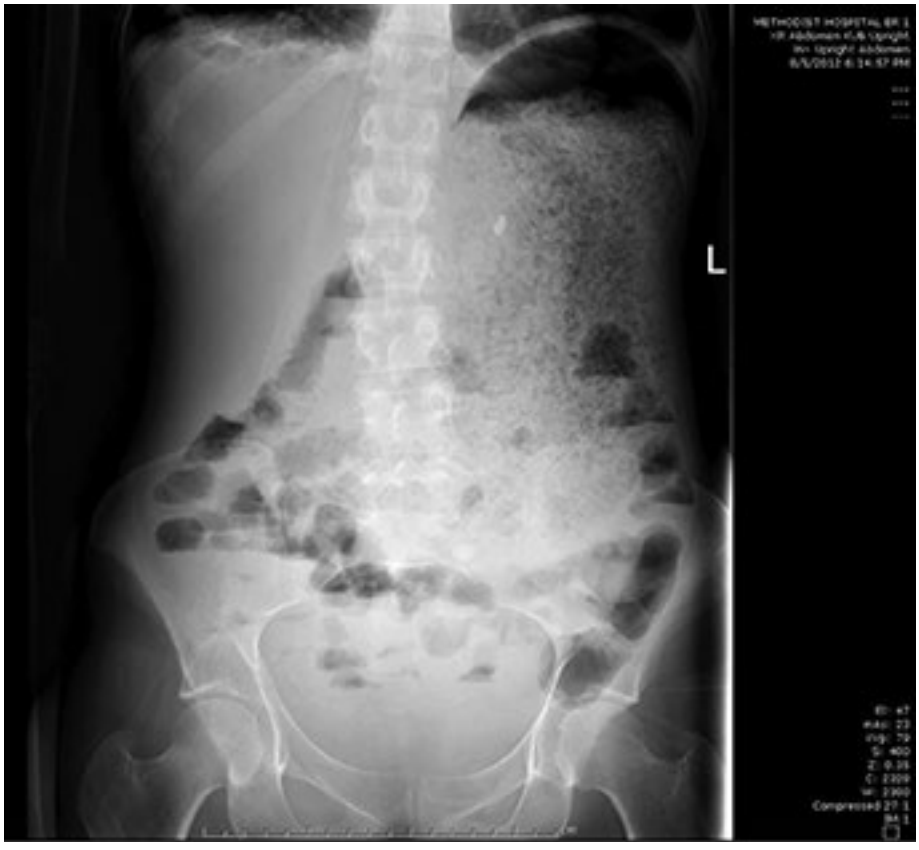
Anorexia nervosa is a complex psychiatric disorder with significant morbidity and mortality (1), often requiring inpatient multidisciplinary care. Starvation, purging, and overexertion affect multiple organ systems and cause a variety of complications (2). In the United States, conservative measures for lifetime prevalence of anorexia nervosa are as follows: 0.3% of males, 0.9% of females, and 0.6% of the overall population (3). According to DSM-5, anorexia nervosa is an eating disorder characterized by restriction of energy intake relative to requirements, leading to significantly low body weight for the patient's age, sex, and physical health. Moreover, these patients experience intense fear of weight gain or becoming fat and demonstrate behavior that interferes with such. Distorted body image perceptions of weight or shape and undue influence of these factors on self-evaluation are also primary diagnostic features. This may include a persistent lack of recognition of the consequences caused by the patient's low weight.

There are two types of anorexia nervosa: restricting type and binge-eating/purging type. The severity of anorexia nervosa is now specified by body mass index (BMI), with ranges of mild (≥17 kg/m^2), moderate (16 kg/m^2–16.99 kg/m^2), severe (15 kg/m^2–15.99 kg/m^2), and extreme (<15 kg/m^2) (4). Amenorrhea is no longer a diagnostic requirement and represents a change from DSM-IV-TR nomenclature.

Anorexia nervosa is a complex psychiatric disorder with significant morbidity and mortality, often requiring inpatient multidisciplinary care.

Severe caloric restriction and protein malnutrition lead to decreased oncotic pressure and edema. Potential fluid overload in the face of very low oncotic pressures (secondary to hypoalbuminemia) must be conceptualized when treating patients with anorexia nervosa. Symptomatic dehydration in patients with anorexia nervosa should still be treated promptly with standard fluid resuscitation. However, daily maintenance fluid needs should be managed with oral fluid intake goals or conservative intravenous fluid supplementation.

FIGURE 1. Acute Gastric Distention in Patient With Stomach Measuring >32 cm



A 28-year-old woman with anorexia nervosa, restrictive type, is evaluated.

"Miss S" is a 28-year-old woman who was transferred from an outside hospital to our inpatient psychiatric unit for treatment of anorexia nervosa, restrictive type. On admission at the outside facility, her weight was 25.5 kg (56.2 lbs), with a height of 165 cm and body mass index (BMI) of 9.4. After 3 weeks of aggressive intravenous fluid resuscitation at the outside hospital, she experienced significant third-spacing. On the day of transfer to our hospital, her weight was 50.8 kg (112 lbs), for a total of 25.3 kg weight gain, which represented a doubling of her initial dry weight and a BMI of 18.7. Her condition was complicated by several disorders associated with anorexia nervosa to include anemia, pleural effusion, abdominal ascites, anasarca with prominent lower extremity and pelvic edema, acute pancreatitis, and metabolic disturbances consistent with refeeding syndrome (hypophosphatemia, hypercalcemia, hypomagnesemia, hypokalemia, and metabolic alkalosis). Physical examination revealed painful, bilateral 4+ pitting edema in the lower extremities, as well as bradycardia. Echocardiogram results showed preservation of an ejection fraction of 60% but were notable for mild mitral regurgitation and pericardial effusion.

The patient initially began an oral feeding regimen per our institutional eating disorder protocol. For the first 13 days, the edema showed minimal improvement despite daily negative fluid balance, 1 L daily fluid restriction, and conservative use of furosemide. On day 13, she developed pronounced nausea, and all oral intake was discontinued temporarily due to worsening abdominal distention and concern for possible bowel obstruction. A plain film abdominal x-ray showed a massively distended stomach, measuring up to 32 cm, and a paucity of bowel gas necessitating nasogastric tube placement for emergent decompression (Figure 1). A peripherally inserted central catheter was placed, and total parenteral nutrition with albumin was initiated. It is logical that the patient's severe and intractable edema was equally severe in the abdominopelvic region, thus affecting the bowel itself, causing a dysmotile and malabsorptive state. Oncotic pressure remained low, and the painful edema persisted until albumin was corrected. In this patient, total parenteral nutrition with albumin successfully increased oncotic pressure, allowing for improvement in edema and gastrointestinal tract motility. As her absorptive capacity improved, she was successfully transitioned back to oral nutrition. The patient improved clinically, and at discharge she weighed 40 kg, with a BMI of 14.7.

Using large-volume intravenous fluid replacement to drive a "medically desirable" weight gain is inappropriate at best. Likewise, if edema develops (anasarca or otherwise), it is important not to attempt excessive diuresis early on because the fluid shifts during refeeding can be marked. Serial laboratory examinations should include a complete metabolic panel along with serum albumin, magnesium, and phosphorous measurements to monitor for refeeding syndrome. The primary goal must be to increase oncotic pressure with oral feeding (or total parenteral nutrition if applicable) and allow for gradual resolution of the edema so long as cardiac and pulmonary functions remain stable. The potentially dysmorphic physical manifestation of anasarca may, in and of itself, present an inadvertent barrier to treatment. This occurs when underlying distorted body image perceptions become wildly pronounced during the fragile period of refeeding and fluid resuscitation.

Abdominal distention, fullness, and early satiety are also quite common in anorexia nervosa. Several studies have demonstrated disordered gastric motility and delayed gastric emptying as contributing factors. Although the exact mechanism remains unclear, motility does improve with weight gain (5). Gastric dilatation is a rare but serious complication of anorexia nervosa that must be promptly recognized in patients undergoing refeeding (6, 7). Plain film radiographs are a readily accessible imaging modality to identify gastric dilatation and, if present, an abdominal CT scan can demonstrate evidence of bowel wall edema. Acute distention can be extreme, and increased gastric wall tension can cause ischemia, necrosis, and potentially wall rupture (8). Gastric rupture is more likely to occur following a binge episode but may also occur during refeeding (9, 10). Temporary institution of NPO (nothing by mouth) status, along with urgent decompression by nasogastric tube, may be required. Finally, the need for gastrointestinal and/or surgical consultations should not be overlooked pending the clinical course.

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Residents' Resources

We would like to welcome all our readers to this new feature of the Journal! Here we hope to highlight upcoming national opportunities for medical students and trainees to be recognized for their hard work, dedication, and scholarship.

**To contribute to the Residents' Resources feature, contact Tobias Wasser, M.D., Deputy Editor (tobias.wasser@yale.edu).*

December Deadlines

Fellowship/Award and Deadline	Organization	Brief Description	Eligibility	Contact	Website
APA Resident Research Award **Deadline: December 1, 2014**	APA	Provides an honorarium of $1,500 to five psychiatry residents who submit the best original, unpublished scientific paper.	Residents or fellows in an accredited psychiatry training program in the United States or Canada (APA membership not required).	residentresearch@psych.org	http://www.psychiatry.org/researchers/research-training-and-career-distinction-awards/resident-research-award
APA Fellowship in Public Psychiatry **Deadline: December 12, 2014**	APA	This 2-year fellowship provides experiences that will contribute to the professional development of residents who will play future leadership roles within public sector psychiatry.	PGY-2 residents (PGY-3 also considered if in a 5-year training program); APA resident-fellow member (RFM).	Nancy Delanoche 703-907-8635 ndelanoche@psych.org	http://www.psychiatry.org/residents/fellowships-awards/fellowship-in-public-psychiatry
American Psychiatric Leadership Fellowship **Deadline: December 12, 2014**	American Psychiatric Foundation (APF)	This 2-year fellowship offers psychiatric residents with exceptional leadership potential and many different experiences that prepare them for leadership roles.	APA RFM; PGY-2; One nominee per program.	apl@psych.org	http://www.americanpsychiatricfoundation.org/what-we-do/fellowships/american-psychiatric-leadership-fellowship
APA Child and Adolescent Psychiatry Fellowship **Deadline: December 12, 2014**	APF	Fellowship is designed to promote interest among general psychiatry residents in pursuing careers in child and adolescent psychiatry.	APA RFM; PGY-1, 2, or 3	kids@psych.org	http://www.americanpsychiatricfoundation.org/childfellow

Test Your Knowledge Has Moved

Our Test Your Knowledge feature, in preparation for the PRITE and ABPN Board examinations, has moved to our Twitter (www.twitter.com/AJP_ResJournal) and Facebook (www.facebook.com/AJPResidentsJournal) pages.

We are currently seeking residents who are interested in submitting Board-style questions to appear in the Test Your Knowledge feature. Selected residents will receive acknowledgment for their questions.

Submissions should include the following:

1. Two to three Board review-style questions with four to five answer choices.
2. Answers should be complete and include detailed explanations with references from pertinent peer-reviewed journals, textbooks, or reference manuals.

This month's questions were contributed by Harvinder Singh, M.D., a fourth-year resident at Temple University School of Medicine.

**Please direct all inquiries to Rajiv Radhakrishnan, M.B.B.S., M.D., Senior Deputy Editor (rajiv.radhakrishnan@yale.edu).*

Author Information for *The Residents' Journal* Submissions

The Residents' Journal accepts manuscripts authored by medical students, resident physicians, and fellows; manuscripts authored by members of faculty cannot be accepted. To submit a manuscript, please visit http://mc.manuscriptcentral.com/appi-ajp, and select "Residents" in the manuscript type field.

1. **Commentary:** Generally includes descriptions of recent events, opinion pieces, or narratives. Limited to 500 words and five references.
2. **Treatment in Psychiatry:** This article type begins with a brief, common clinical vignette and involves a description of the evaluation and management of a clinical scenario that house officers frequently encounter. This article type should also include 2-4 multiple choice questions based on the article's content. Limited to 1,500 words, 15 references, and one figure.
3. **Clinical Case Conference:** A presentation and discussion of an unusual clinical event. Limited to 1,250 words, 10 references, and one figure.
4. **Original Research:** Reports of novel observations and research. Limited to 1,250 words, 10 references, and two figures.
5. **Review Article:** A clinically relevant review focused on educating the resident physician. Limited to 1,500 words, 20 references, and one figure.
6. **Letters to the Editor:** Limited to 250 words (including 3 references) and three authors. Comments on articles published in *The Residents' Journal* will be considered for publication if received within 1 month of publication of the original article.
7. **Book Review:** Limited to 500 words and 3 references.

Abstracts: Articles should not include an abstract.

Upcoming Themes

Please note that we will consider articles outside of the theme.

Violence and Mental Health

If you have a submission related to this theme, contact the Section Editor, Ijeoma Chukwu, M.D., M.P.H. (ichukwu@uci.edu).

Prevention in Psychiatry

If you have a submission related to this theme, contact the Section Editor, Amritha Bhat, M.B.B.S., M.D. (amritha@u.washington.edu).

Advances in Antidepressant Therapy

If you have a submission related to this theme, contact the Section Editor, Samuel Wilkinson, M.D. (samuel.wilkinson@yale.edu).