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In This Issue



This issue of *The Residents' Journal* covers a variety of topics. Two articles on child and adolescent psychiatry are presented, with one providing data on the diagnosis and treatment of somatoform disorders in children and adolescents (by Katrine Enrile, M.D.) and another offering information on the evaluation of sleep disturbances in abused individuals in this population (by Brooks R. Keeshin, M.D.). Clozapine-induced myocarditis is discussed in a case report (by Dharmendra Kumar, M.D.), and the benefits of combining mindfulness techniques with physical exercise as adjunctive therapy for psychiatric disorders are reviewed (by Brandon J. Cornejo, M.D., Ph.D.).

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Transitions

Sarah M. Fayad, M.D.
Editor-in-Chief

As we enter the new academic year, I would like to welcome those of you who are new to the *Residents' Journal*. I am beginning my term as Editor-in-Chief after completing an exciting year as Associate Editor. I am privileged to be working alongside the previous Editor-in-Chief, Joseph Cerimele, M.D., who will now serve in the newly created position of Senior Editor, as well as Monifa Seawell, M.D., who is taking on the role of Associate Editor for the 2011–2012 academic year. In the coming year, we hope to provide you with the opportunity to learn about pivotal topics, to author a manuscript, to peer review manuscripts, and perhaps even to learn what is involved in the editing process.

As you can see, this is a time of transition, not only for the *Residents' Journal* but also for all of you. Many of you are beginning residency, while some of you are becoming senior residents or moving into a fellowship. There are other significant changes occurring as well. For example, the American College of Graduate Medical Education has recently approved new duty hours (1), which has the potential to significantly affect the daily operations of a residency program, your patients, and each of you individually. We would be interested in receiving manuscripts that detail the effect this will have on you, your patient care, and your individual programs.

During this time of transition, the *Residents' Journal* can serve as a constant for you, providing information that is important to those of us in training as well as educational opportunities that would be difficult to find elsewhere. We continue to accept manuscripts outside of each guest section theme and are also looking for peer reviewers. I invite you to contact me if you are interested.

Address correspondence to Dr. Fayad (fayad@ufl.edu).

Reference

1. http://www.acgme.org/acwebsite/dutyhours/dh_index.asp (Accessed June 24, 2011)

Treatment Resistant Depression A Roadmap for Effective Care

Edited by John F. Greden, M.D., Michelle B. Riba, M.D., M.S., and Melvin G. McClinnis, M.D.

University of Michigan Comprehensive Depression Center

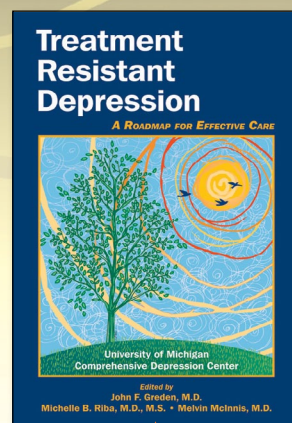
Treatment Resistant Depression: A Roadmap for Effective Care gives clinicians and their patients what they need most desperately: a sequence of steps that reflect state-of-the-art diagnostic procedures and integrates all evidence-based treatment modalities—in short, a roadmap to wellness and recovery.

Based primarily on the experiences of the authors, all of whom are leading researchers and/or clinicians in Treatment Resistant Depression and affiliated with the University of Michigan Comprehensive Depression Center, the book also draws upon the clinical research advances and treatment innovations of programs around the world. Designed to be useful across disciplines and treatment modalities, the book includes a multitude of tables, graphs, and learning aids that will benefit students, instructors, and clinicians.

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Somatoform Disorders in Children and Adolescents: A Review

Katrine Enrile, M.D.

Department of Child and Adolescent Psychiatry, University of Southern California, Los Angeles

Somatoform disorders are a set of disorders in which patients present with physical complaints that have psychiatric origins. Although their symptoms suggest a medical disorder, they cannot be fully explained by a medical condition, substance abuse, or mental disorder. This set of disorders includes somatization disorder, conversion disorder, pain disorder, hypochondriasis, body dysmorphic disorder, and undifferentiated somatoform disorder (1). Somatoform disorders should be considered if symptoms are recurrent, impairing, have no medical explanation, and are not produced voluntarily. Fifty percent of individuals with these disorders remain disabled after 1 year of symptoms. Up to one-half of these patients will not meet criteria for any medical or psychiatric diagnoses and are left without any clear treatment guidelines by both psychiatric and medical standards (2). Psychiatrists and other physicians are faced with the challenging task of how to correctly diagnose and treat this condition. Identifying and appropriately managing children and adolescents with somatoform disorders is particularly challenging because of the different symptoms with which they often present. There can also be a complex maze of social and family factors to be navigated. The cost of not treating symptoms effectively may lead to significant emotional, financial, and educational impairment. Lack of research studies on this age group only adds to any confusion as to how to best provide treatment.

Diagnostic Factors

Despite children often having complaints about pain, without a clear etiology, the diagnosis of somatoform disorders in children and adolescents is rare, seen only in 0.2% of children and adolescents in the community (3). This is partly because the criteria established for diagnosing this illness are based on symptoms in adults. Thus, the criteria are developmentally inappropriate for younger age groups.

Children often do not have sexual or pseudoneurological complaints. Pain is a central criterion for diagnosis, and one's ability to describe pain is largely dependent on his or her cognitive ability (3). As children grow, they develop a more sophisticated method of describing somatic complaints. Pain and muscle aches are usually reported by younger children, with complaints of fatigue and neurological symptoms typically reported by adolescents (3, 4). The most common recurrent symptoms reported in children are headaches, low energy/fatigue, sore muscles, and stomach/abdominal discomfort (5).

There is often much clinical frustration in dealing with these patients because of the difficulty in managing symptoms and the patient's frequent lack of response to clinical interventions (6, 7). Patients also frequently experience dissatisfaction with their physicians, often leading to "doctor shopping" and avoidance of psychiatric referrals (6, 7). Both clinicians and patients question the treatability of this condition. Additionally, patients often feel disbelieved by their doctors, which only contributes to ineffective management (6).

Risk Factors

There are several theories regarding genetic and social factors from childhood that contribute to the formation of a somatization disorder. Somatoform disorders tend to run in families. Having a family member with a chronic physical illness is linked to childhood somatization symptoms. Children with somatoform disorders are associated with families with anxiety and/or depression (5). Based on a social learning paradigm, there is an implied element of modeling or learned behavior in somatization. Children in families with somatoform disorders often share symptoms in common with a sick family member or imitate physical symptoms of a family member that has passed away (3). Parent reactions

to the child's condition greatly influence the way a child handles his or her physical symptoms.

The presence of physical illness is another developmental factor. Between 10% and 40% of patients diagnosed with conversion disorder are later found to have a medical disorder. These patients may have increased attention and focus on physical sensations, which leads to an exaggerated cognitive reaction to stimuli. Adults with somatoform disorders often have a history of childhood hospitalizations, with resulting symptoms linked to the type of parental care they received (3). For example, a child's presenting with symptoms can be positively reinforced if the child is given extra attention, allowed to miss school, or excused from performing duties. The symptoms can also serve a family function by allowing family members to communicate and act as a cohesive group in relation to the problem. This process may help the family to avoid conflict (5). Additionally, the child can use the symptoms as a means of expressing emotions or conflicts that he or she cannot otherwise verbalize. The presence of childhood sexual abuse can lead to increased pain complaints. These victims tend to score higher on somatization measures (3). The physician's response to this illness by making uncertain diagnosis, giving inadequate medical advice, recommending unnecessary procedures, or providing excessive reassurance also plays an important role in the development of the condition (4).

A psychiatrist must conduct a complete initial assessment, work-up, and psychosocial history. Clues indicating the presence of a somatoform disorder include a personal or family history of somatoform diagnosis; a temporal relationship of symptoms with stressors; the presence of other psychiatric disorders; social reinforcement of symptoms; the presence of a model; and symptoms

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that do not follow an anatomical pattern, fluctuate, or respond to psychological treatment or placebo (8).

Treatment

Strategies utilized in treating somatoform patients include scheduling regular visits with the primary doctor. This helps to improve communication with the physician, address family concerns and patient fears, provide reassurance that no serious condition is present, limit subspecialty referrals, and avoid unnecessary tests and procedures (8). Identifying one physician to coordinate care and communication among all specialists, teachers, and family members is useful (3, 8, 9). This strategy reduces medical utilization and healthcare cost. However, it does not provide symptom relief or address illness concerns, nor does it improve quality of life or functional status (2, 7, 8). It is important to target comorbid illnesses, such as depression and anxiety, with therapy and medications as indicated. Cognitive-behavioral therapy (CBT) is helpful in physical symptom reduction, alleviating psychological distress, addressing comor-

bid anxiety/depression, and improving functional status (2). Kroenke (7) reviewed the randomized control trials of somatoform treatments and found CBT to be beneficial in 11 out of 13 trials. Antidepressants were also found to be helpful in four out of five randomized controlled trials reviewed. Treatment goals should focus on functional improvement rather than finding a “cure” and emphasize a return to normal living (8, 9). Somatoform disorders in children and adolescents are complex and difficult to diagnose, and treatment requires a multifaceted approach to reduce the functional impairment and emotional burden on patients and their family members.

Dr. Enrile is a second-year fellow in the Department of Child and Adolescent Psychiatry, University of Southern California, Los Angeles.

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Evaluating Sleep Disturbances in Abused Children and Adolescents

Brooks R. Keeshin, M.D.

Cincinnati Children's Hospital Medical Center, Mayerson Center for Safe and Healthy Children, Cincinnati

Sleep disturbances are a common problem among children. In general, anywhere from 13% to 40% of children suffer from sleep disturbances (1). These disturbances are either primary or secondary to medical, behavioral, or neuropsychiatric etiologies. Victims of abuse are a distinct subset of children with sleep disturbances, with well-described psychological sequelae associated with histories of abuse (2). Abuse victims often suffer from sleep disturbances related to posttraumatic stress disorder (PTSD) and other mental illnesses that develop during or after the abusive experience (3).

Differential Diagnosis

When evaluating children with a history of abuse, it is vital that an accurate and detailed timeline be constructed to compare the onset and duration of abuse with the onset of sleep difficulties. Although sleep disturbances may be exacerbated by an episode of abuse, only a careful history will elucidate whether a child had some signs of sleep disturbance prior to the abuse. In these cases, one should evaluate for sleep disturbances resulting from primary insomnia or secondary to a medical condition such as obstructive sleep apnea (see Lipton et al. [4] for review). The use of sleep diaries and primary sleep screening tools such as the five-item B.E.A.R.S. (bedtime problems, excessive daytime sleepiness, awakening during the night, regularity and duration of sleep, snoring) scale and the Ten Item Sleep Screener may be helpful, since data from these measures will assist the clinician in a focused investigation of medical conditions, sleep habits, and psychosocial considerations necessary to diagnose primary and secondary sleep disturbances (4).

Specific Psychiatric Disorders

Abused children may meet criteria for PTSD or develop clinically significant

posttraumatic stress symptoms. These children report higher rates of nightmares than unaffected children as well as symptoms of hyperarousal and avoidance. These symptoms exacerbate sleep disturbances (see Charuvastra and Cloitre [3] for review). Sleep architecture is altered in individuals with PTSD, including increased stage 1 sleep, decreased slow-wave sleep, and increased activity in REM (3). Furthermore, children with PTSD have alterations in the hypothalamic-pituitary-adrenal axis system, including in the diurnal activity of cortisol (5) and tonic elevations in norepinephrine (6), all of which may affect sleep.

In addition to biological changes, it is important to appreciate the context in which the abuse may have occurred as a potential trigger for sleep disturbances. For example, victims of intrafamilial sexual abuse often experienced their abuse at night, and thus nighttime or darkness might trigger a state of hypervigilance and interfere with the child's ability to relax and fall asleep (7). Furthermore, the child's bedroom may have been the site of the abuse, and therefore simply entering the room may prompt the child to engage in behaviors such as avoidance, even when the threat of the abuse has been removed (7). In these children, any posttraumatic symptoms are likely to be heightened in the location where the abuse occurred. Children who may have experienced dissociation during the abusive experience may have increased dissociative episodes during bedtime, further complicating the bedtime routine.

Behavioral problems may be a manifestation of PTSD or other mental illness commonly found in victims of abuse and persist long after the abuse has ceased (8). In early childhood, behavioral disturbances may be marked with tantrums, acting out, or open defiance. The evening bedtime routine offers an opportunity for regular and predictable episodes of be-

havior problems. This may result from oppositional behavior or heightened stress around bedtime. If a child's sleep disturbance is primarily behavioral, these children are not likely to report nightmares or additional disturbances once they are asleep. In adolescents with a history of abuse, drug use and other risky behavior, along with oppositional behavior, may interfere with normal sleep patterns and should be considered when the adolescent discloses sleep difficulty or when a parent reports either significant difficulty in awakening the adolescent or observing daytime sleepiness.

Additionally, mental illnesses such as anxiety disorders, mood disorders (including depression and bipolar disorder), and attention deficit hyperactivity disorder are often observed in children and adolescents with a history of abuse (6). These psychiatric illnesses have well-described associations with sleep disturbances, as either an aspect of the diagnostic criteria or an associated comorbidity. However, it is important to remember that chronic insomnia may exacerbate symptoms of anxiety and depression (9) or induce a paradoxical response exacerbating symptoms of hyperactivity or mania.

Since children with a history of abuse are more likely to be diagnosed with both mental and medical illness, it is important to evaluate current pharmacological interventions when determining the etiology of sleep disturbances. Many children treated with stimulant medication may suffer from increased sleep latency, and treatment with selective serotonin reuptake inhibitors may alter sleep architecture and cause sleep disturbances (10). Additionally, children treated with mood stabilizers and atypical antipsychotics during the daytime may appear drowsy, leading parents to be concerned about sleep difficulties.

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Treatment

Knowledge that a child with sleep disturbances has a history of abuse may enhance a psychiatrist's formulation and treatment plan. For example, evidence-based cognitive behavioral therapies may be beneficial in addressing contextual and behavioral issues around chronic sleep disturbances. However, when behaviors result from stress-related triggers, an intervention that does not directly address the abuse may not be as effective. The identification of one or more mental illnesses in the context of a history of abuse may afford an opportunity for the use of psychotherapy, psychopharmacologic intervention, or both to address the illness and possibly resolve the sleep disorder. In this clinical situation, an understanding of the timing of sleep disturbances in relation to the onset of additional symptoms is critical, since one might consider a different treatment strategy if the chronic sleep disturbance preceded other symptoms and therefore may be exacerbating symptoms of mood or anxiety disorders. Psychotropic medications may not be as effective in children with a history of abuse, and abused children may be susceptible to side effects from pharmacologic interventions that exacerbate sleep disturbances.

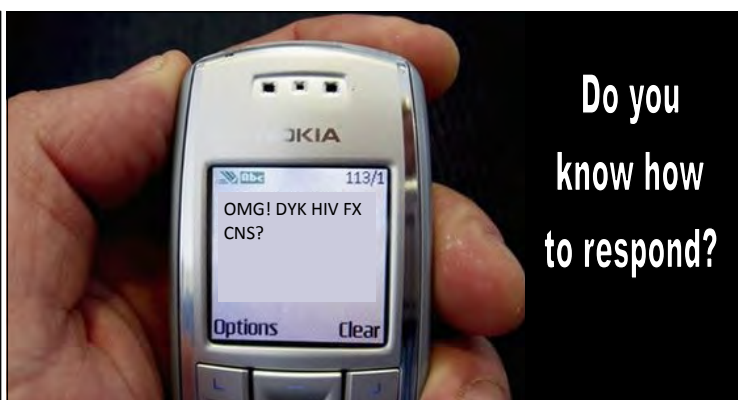
Abused children disproportionately suffer from sleep disturbances relative to other clinical and nonclinical populations. Thus, residents must be trained not only to identify pediatric sleep disturbances but to uncover potential etiologies and formulate treatment strategies regarding these disturbances in abused children.

Dr. Keesbin completed a Triple Board residency at the University of Utah and is a second-year fellow in Child Abuse Pediatrics at Cincinnati Children's Hospital Medical Center, Mayerson Center for Safe and Healthy Children, Cincinnati.

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Case Report

Clozapine-Induced Myocarditis: A Case Report

Dharmendra Kumar, M.D.

Department of Psychiatry, Louisiana State University Health Sciences Center School of Medicine, Shreveport, La.

Clozapine is recognized as the gold standard for treatment-resistant schizophrenia (1), but its use is restricted because of several serious adverse effects (2), including myocarditis, which recent literature suggests is more common than initially thought (3). Most cases of clozapine-induced myocarditis have been reported within only a few weeks of starting treatment (2). However, the present case illustrates the possible risk of development of myocarditis in patients who have been stable while receiving clozapine treatment for several months.

Case

“Ms. C” was a 48-year-old Caucasian woman who was admitted to the hospital with complaints of shortness of breath, nonlocalized chest pain, and generalized weakness that had lasted for 6 days. She had a long history of schizophrenia and hypothyroidism, for which she was receiving clozapine (250 mg daily) and levothyroxin (100 mg daily), respectively. On admission, laboratory results of her liver function, kidney function, complete blood count, and thyroid stimulating hormone level as well as a urine drug screen were negative for any abnormal value. A chest X-ray was suggestive of bilateral pleural infiltration, and ECG results indicated tachycardia and new-onset left-bundle branch block (Figure 1). In addition, a high value of brain natriuretic peptide (1,281 picograms/ml)

indicated myocardial pathology, but the patient’s serial blood troponin level was negative for infraction. The patient was started on intravenous antibiotics for suspected pneumonia, but her condition remained unchanged after day 4 of hospitalization. Further examination included a computerized tomography scan of her chest, which reconfirmed the X-ray findings. A cardiac stress test and echocardiography indicated significant reduction in ejection fraction (15%) and global hypokinesia of the heart, which suggested the diagnosis of myocarditis. In the absence of any infectious or metabolic factors and since clozapine has a Food and Drug Administration black box warning for myocarditis (4), the drug was seen as a causative agent. Ms. C had been receiving clozapine treatment for 11 months and was asymptomatic for any psychotic symptoms, and thus the psychiatry consult team decided to discontinue clozapine and switch to olanzapine, since the response data for olanzapine in patients who are intolerant to clozapine are positive (5).

Figure 1: ECG Results in a Patient With Clozapine-Induced Myocarditis

ECG at Initial Presentation (Left-bundle branch block)



ECG After Recovery (Resolved left-bundle branch block)



Ms. C’s cardiac symptoms improved dramatically within 4 days of clozapine discontinuation. A 4-month follow-up echocardiography showed significant im-

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Table 1: Echocardiography Results in a Patient With Clozapine-Induced Myocarditis

Echocardiography at the Time of Symptom Presentation	Echocardiography 4 Months After Clozapine Discontinuation
Septal hypokinesis	Mild global left ventricular hypokinesis
Left ventricular ejection fraction 15%–20%	Left ventricular ejection fraction 40%–45%
Mild left ventricular and left atrial enlargement	Normal chamber sizes
Severely reduced left ventricle systolic function	Left ventricle systolic function significantly improved
Reduced stroke volume	Stroke volume at lower limits of normal
Moderate mitral valve and tricuspid valve regurgitation	Normal diastolic function

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provement in cardiac activity (Table 1). At a 1-year psychiatric follow-up evaluation, the patient was negative for relapse of any psychotic symptoms.

Discussion

The incidence of clozapine-induced myocarditis varies from 0.0015% to 1.3% (6), with up to 90% of cases occurring within 4 to 8 weeks of drug initiation (2). Mechanisms of developing myocarditis are largely unknown, but a few published case reports suggest hypersensitivity myocarditis as a possibility (1). Diagnosis is made based on strong clinical suspicion of nonspecific symptoms, which includes fever, shortness of breath, fatigue, tachycardia, and flu-like symptoms (2). Ironically, many of these nonspecific symptoms have been noticed in patients during normal clozapine titration (7). EKG, echocardiography, chest magnetic resonance imaging, and blood troponin level analysis may help in making the diagnosis. A recently published case analysis suggests that nonspecific inflammatory marker C-reactive protein may be the first measurable parameter to herald the onset of disease process. C-reactive protein elevation above 50 mg/l or development of fever in a patient receiving clozapine treatment warrants

close monitoring of the patient by daily ECG and troponin determination (7). Suspected cases require immediate cessation of clozapine treatment (2) and other supportive measures for control of blood pressure and heart rate. Early diagnosis and management may result in spontaneous resolution (3), as demonstrated in the present case. Controversy exists over clozapine rechallenge, since some patients have experienced a recurrence of symptoms on rechallenge (3), which includes three of five rechallenged patients reported by the manufacturer of the drug (4). However, one case report described successfully resumed clozapine treatment without recurrence of the disease (8).

Clozapine is recognized as the most effective antipsychotic available for treatment-resistant schizophrenia (1), but its use is limited to third-line therapy because of its adverse reactions, which includes agranulocytosis, neutropenia, seizure, and myocarditis (7). The present case report suggests that a wider window of myocarditis diagnosis exists for patients receiving clozapine treatment, and close monitoring needs to occur for those experiencing any suggestive symptoms.

Dr. Kumar is a fourth-year resident in the Department of Psychiatry, Louisiana State University Health Sciences Center School of Medicine, Shreveport, La.

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CALL FOR PAPERS

The Residents' Journal is looking to publish articles on disorders of memory, dementia, and other types of cognitive impairment (e.g., impairment subsequent to brain trauma)

SAMPLE TOPICS ARE AS FOLLOWS:

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- Review article describing standardized tools used to track progression of cognitive disorders;
- Review article of the different domains of memory and the disorders affecting each domain; and
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We will consider manuscripts on other topics.

The Potential Benefit of Combining Mindfulness and Physical Exercise

Brandon J. Cornejo, M.D., Ph.D.

Department of Psychiatry, University of Wisconsin Hospitals and Clinics, Madison, Wisc.

Mindfulness is a nonjudgmental, present-centered awareness in which each thought, feeling, or sensation that arises in an individual is acknowledged and accepted (1). For some individuals, exercise may induce a mindful state because movement can enable the mind to focus in a non-self-conscious awareness during an intrinsically rewarding activity with immediate feedback. These conditions are characteristic of Csikszentmihalyi's "flow state" (2). It may be that mindfulness and flow have similar properties that overlap and may prove beneficial to mental health. If so, this may help to explain why physical movement, such as yoga or running, has been shown to have positive benefits for individuals suffering from affective and thought disorders (3). However, even given the potential benefits of exercise, sedentary rates among general and psychiatric populations remain high. As such, there is an impetus to engage psychiatric populations in adjunctive exercise that may be beneficial to their overall well-being. The purpose of the present article is to define mindfulness as a therapeutic approach and to suggest that exercise and mindfulness can work synergistically in a psychiatric population. Finally, appropriate deployment of mindfulness skills may help individuals with psychiatric disorders participate and remain in an exercise program as a form of adjunctive therapy.

Mindfulness

Kabat-Zinn et al. (1) first provided a detailed description of mindfulness-based stress reduction in which attention is selectively focused on the immediate timepoint. The initial program consisted of formal daily meditation along with skill building homework connecting the participant to the "here and now." The participant does not work on judging or evaluating the present moment but instead focuses on simply "being" present

and attempts to extend this mindset to day-to-day life (1). Mindfulness gives individuals the mental "space" between perception and response that enables them to have reflective as well as non-reflexive responses. This may trigger an increase in metacognitive awareness that prevents depressive relapse (4). Mindfulness-based cognitive therapy, a form of therapy that combines elements of mindfulness with cognitive-based approaches to treatment, can be an effective approach for the treatment of anxiety (5) or depressive disorders (6). It is believed that mindfulness, a distinct philosophical underpinning of mindfulness-based cognitive therapy, may enhance mood as well as help eliminate negative cognitions associated with depressive states (6).

Mindfulness, Exercise, and Mental Health

Independent of mindfulness, we know that aerobic and nonaerobic exercise may be effective in treating depressed mood (7). Both types of exercise allow a form of mindful movement. There are also data to suggest that patients with schizophrenia and bipolar disorder benefit from physical exercise, with improved mood and a sense of well-being (3).

Yet, there have been few studies that examine the synergistic effect of physical movement and mindfulness on psychiatric populations. The available studies have focused on yoga or Tai Chi. Overall, these studies suggest a beneficial effect of mindfully based movement on mood, affect, and cognitive distortions in patients with depressive mood (7).

Recent work suggests that mindfulness-based techniques can also enhance sport-specific performance (8). Such techniques can enable athletes to become more immediately aware of their bodies through a sharpening of focus on the present moment. As much as mind-

fulness can act as a treatment for anxiety disorders (5), it may also improve sport anxiety-related worry as well as perfectionism, specifically in long-distance runners (9).

It is intriguing that exercise and mindfully based movement can improve mood disorders in day-to-day life as well as improve sport-specific performance. One reason for this is that mindfulness and mindful exercise have a similar effect on an individual's psychiatric well-being because they share characteristics enabling an individual to be in a flow state; that is, both induce a mental state where there is balance between skill, a specific objective, and immediate feedback (2). Some have speculated that mindfully based movement and mindfulness induce their effects through modulation of the hypothalamic pituitary axis, enhancing gamma-aminobutyric-acid-ergic tone or altering dopaminergic function (7). It may be that these same mechanisms are functional in mindfulness and play a role in the sensations associated with flow.

Motivation for Exercise

If mindfulness, exercise, and mindful movement enhance mood and improve cognitive distortions, it stands to reason that encouraging both exercise and mindfulness techniques could be of benefit to our patients. Although there have been studies using elements of mindfulness as motivational techniques, to the best of our knowledge, encouraging patients to utilize mindfulness techniques to maintain continuity in an exercise program has not been formally studied. That said, a combination of formal meditative practice with informal techniques can be used during a chosen sport, allowing exercise to become a mindful activity (10). In doing so, the patient may find some techniques useful in maintaining an exercise

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program that is clearly beneficial for their overall mental and physical well-being.

These techniques involve learning to focus on breathing and adapting to “mental chatter” and negative emotion that influence behavior in a nonproductive fashion in the context of exercise. Awareness of the bodily state can prevent athletes from being on “automatic pilot,” in which they act and react without conscious awareness. By learning to stay present, the athlete can gain an awareness and acceptance of physical discomfort as a temporary state. Furthermore, labeling thoughts may allow individuals to gain insight into their cognitive and emotional states that limit their ability to continue in an exercise program (10).

We may be able to tap into our innate affinity for physical movement by utilizing mindfulness skills effectively. The practice of mindfulness may enable us to reach our patients in such a way that they may be willing to find a physical activity that appeals to them and could help in recovery from a variety of psychiatric conditions (2). In doing so, we may be able to bring our patients to a more holistic state of mental well-being that could

positively have an effect on their psychiatric condition.

Dr. Cornejo is a fourth-year resident in the Department of Psychiatry, University of Wisconsin Hospitals and Clinics, Madison, Wisc.

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The Curious Incident of the Dog in the Night-Time

Melissa J. Lesca, M.D.

Department of Child and Adolescent Psychiatry, University of Southern California Medical Center, Los Angeles

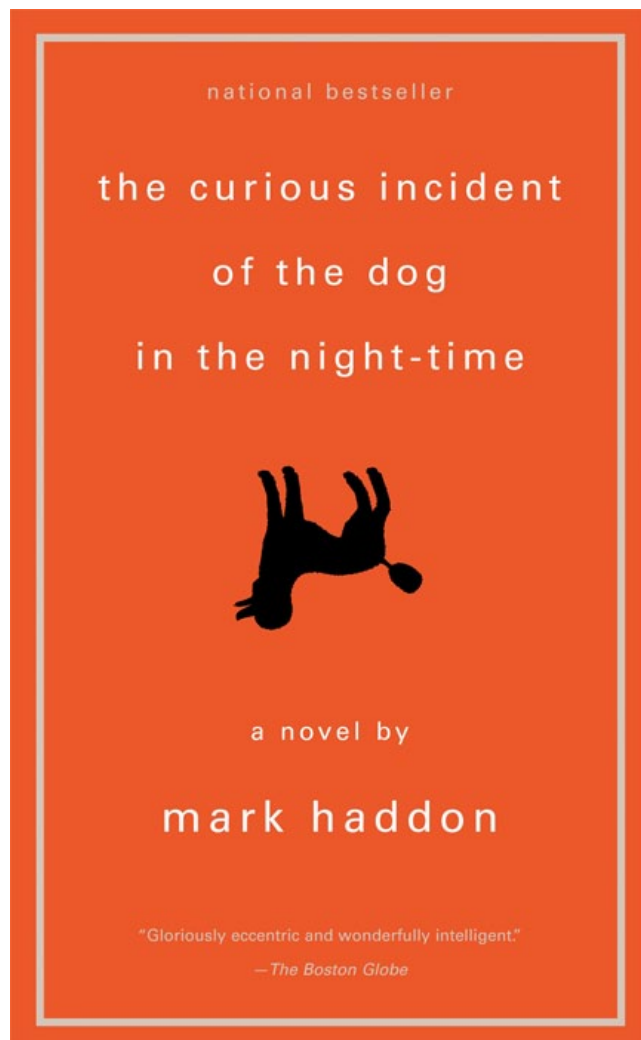
The Curious Incident of the Dog in the Night-Time, by Mark Haddon, offers an informative perspective on the relative truths and contradictions that dominate the life experiences of an individual with an autism spectrum disorder. Armed with a degree in English and English literature, the Oxford-educated author was inspired to write this book by working with children with autism. Despite the lack of scientific research to support the nuances of personality traits observed in individuals with autism spectrum disorders, the author has a profound ability to tell a convincing and empathic story.

The protagonist is Christopher John Francis Boone, a youth of “15 years and 3 months and 2 days,” who sets out on a journey that leads him to discover unnerving truths hidden within well-intentioned lies. The book chronicles his investigative attempts to discover who stabbed Mrs. Shears’ dog Wellington. The pedantic use of language in the title illustrates a peculiarity of verbal and non-verbal communication commonly seen in people with autism spectrum disorders. The chapters are organized by prime numbers. Christopher’s detailed explanation of how to work out prime numbers captures one of my favorite themes of the book while calling attention to the technical and obsessive quality of his interests. He believes that mathematical rules are relatively easy to follow, but there are no simple formulas to work out the bigger numbers. Without realizing it, he teaches the reader that reliance on science alone is a limitation when trying to work out complicated life problems.

Every narrative story must have a respectable antagonist. In this particular novel, *chaos* is in direct opposition to the success of Christopher, as he requires order, structure, and logic to get through

the activities of daily living. The medical field has established that reasonable levels of stress protectively raise cortisol levels in our bodies. In the case of someone like Christopher, too much stress interferes with the physiological action of a sensitive brain. Haddon does a fantastic job helping the reader understand the hellish feeling of sensory overload from Christopher’s perspective while also demonstrating the soothing power of a moderated sensory experience, like petting the black fur of a large poodle.

With the recent success of the movie *Temple Grandin* and increasing research in the field of autism spectrum disorders, this diagnosis is becoming less mysterious every day. The more we learn about this population, the more heterogeneous it becomes. However, there are certain personality traits and communication styles that are unique to this spectrum of diagnoses. I highly recommend this book as a supplement to research-based resources to anyone wanting to gain a greater understanding of this enigmatic disorder.



by Mark Haddon
New York, Vintage, 2004, 226 pp., \$14.00.

Dr. Lesca completed a fellowship on June 30, 2011, in child and adolescent psychiatry at the University of Southern California Medical Center, Los Angeles, and was a fifth-year resident at the time this book review was accepted for publication.

The Handy Psychology Answer Book

Hetal Bhingradia, M.D.
Janki S. Modi, M.D.

Department of Psychiatry, Beth Israel Medical Center, New York

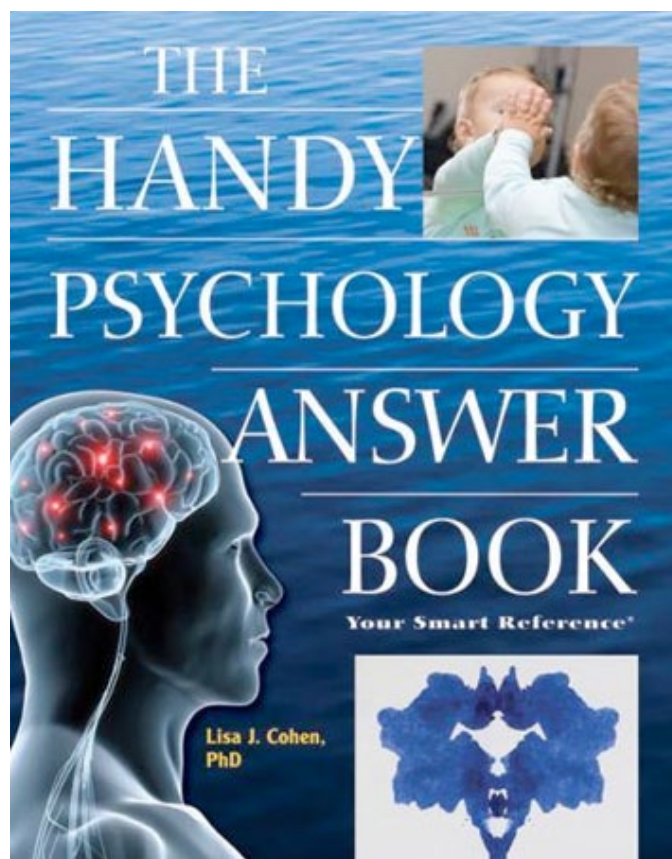
The Handy Psychology Answer Book is written by Dr. Lisa Cohen, a licensed clinical psychologist. She is Associate Professor of Clinical Psychiatry at Albert Einstein College of Medicine and the Director of Research for Psychiatry and Psychology at Beth Israel Medical Center. With this book, Dr. Cohen undertook the important endeavor of providing material that is easily accessible and engaging but also scientifically grounded. Although this book is intended for the general public, it also can be used as a supplement to traditional textbooks, serving as a brief review of all aspects of the science of psychology. It features more than 1,000 answers to questions, from “How does the insula provide information about internal bodily states?” to “What is Evan Stark’s model of coercive control?” Complex topics are broken down seamlessly while still upholding strict scientific standards through the incorporation of only those conclusions that are supported by firm if not multiple references.

It is an attention grabbing text that touches on a wide variety of topics that may attract anyone with the slightest interest in psychology. Dr. Cohen elaborates on topics that we all may wonder about while adding a biological and research-oriented spin to certain areas, such as how interpersonal experience affects brain development in childhood. Topics ranging from human development to mental health and mental illness are covered. The book starts off with an explanation of the fundamentals of psychology, with specific emphasis on history and famous researchers who contributed to the understanding of the field. It also contains pictures and graphs to help illustrate complex ideas when necessary, which are helpful for readers who may not be well-

versed in scientific terminology. The text finally goes on to explain the human motivation behind sex, money, marriage, and even pleasure.

While the book is a good addition to a primary source, it is not meant as a primary reference but rather just a starting point for those who have an interest in psychology. Given the wide range of topics covered and that only salient features of each subject are introduced, it can leave the reader longing for more information. However, there is a comprehensive reference included at the end, allowing the reader to follow up on all areas he or she may find stimulating.

By covering a vast array of topics in a comprehensible format, *The Handy Psychology Answer Book* showcases the scientific discipline of psychology. The book excels in explaining human behavior by targeting issues that everyone thinks about and faces at one point or another in life. Whether it be the beginner student with an interest in psychology or the well-experienced psychiatrist, it is



by Lisa J. Cohen, Ph.D.
Canton, Mich., Visible Ink Press, 2011, 450 pp., \$21.95.

clear that anyone who reads Dr. Cohen’s book is sure to find something intriguing. Every reader is bound to walk away with at least one new interesting fact or theory that they did not know before. Dr. Cohen succeeds in her mission of advancing the accessibility of psychology.

Drs. Bhingradia and Modi are third-year residents in the Department of Psychiatry, Beth Israel Medical Center, New York

TEST YOUR KNOWLEDGE

In preparation for the PRITE and ABPN Board examinations, test your knowledge with the following questions.
(answers will appear in the next issue)

This month's questions are courtesy of Karthik Sivashanker, M.D., from the Department of Psychiatry at New York Presbyterian Hospital, Weill Medical College of Cornell University, New York.

Question #1

Which of the following statements regarding chronic benzodiazepine use is true?

- A. Chronic benzodiazepine use is likely to be associated with long-term and persistent cognitive deficits.
- B. Cognitive deficits associated with chronic benzodiazepine use are transient and dissipate with removal of the agent.
- C. The evidence regarding chronic benzodiazepine use and cognitive impairment remains inconclusive.
- D. Chronic benzodiazepine use is likely not associated with long-term cognitive impairment.

Question #2

Which of the following statements regarding the acute management of insomnia is true?

- A. "Z-drugs" (zaleplon, zolpidem, and zopiclone) do not have the same risk for abuse or dependence as short-acting benzodiazepines.
- B. If a patient fails to respond to a short-acting benzodiazepine for the acute management of insomnia, switching to a "z-drug" is a clinically useful strategy given the differences in effectiveness, adverse effects, and potential for abuse or dependence of these drugs.
- C. If a patient fails to respond to a short-acting benzodiazepine for the acute management of insomnia, switching to a "z-drug" is *not* a clinically useful strategy because there is no clear evidence for a difference in effectiveness, adverse effects, or potential for abuse or dependence.
- D) "Z-drugs" do not cause as much daytime sedation as short-acting benzodiazepines.

ANSWERS

Answers to June Questions. To view the June Test Your Knowledge questions, go to <http://ajp.psychiatryonline.org/cgi/data/168/6/A50/DC2/1>.

Question #1.

Answer: C. Clozapine or olanzapine

In a recent study of more than 2,500 patients who were hospitalized for the first time with a diagnosis of schizophrenia, clozapine and olanzapine were shown to have a lower risk for hospitalization than other oral antipsychotics, including risperidone, perphenazine, quetiapine, and haloperidol.

Reference

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Question #2

Answer: D. Ovarian teratoma

Individuals with anti-N-methyl-D-aspartic acid receptor encephalitis will frequently have an underlying neoplasm. In young women, the most likely diagnosis to be found is an ovarian teratoma.

Reference

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▶ 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 in the issue in which their questions are featured.

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.
- *Please direct all inquiries and submissions to Dr. Fayad; fayad@ufl.edu.

Author Information for *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.

- 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 Issue Themes

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

August 2011

Section Theme: Clinical Trials
(Send e-mail to Joseph Cerimele, M.D.;
joseph.cerimele@mssm.edu)

September 2011

Section Theme: Addiction
Guest Section Editor: Jonathan Avery, M.D.
joa9070@nyp.org

October 2011

Section Theme: Interventional Psychiatry
Guest Section Editor: Adam Stern, M.D.
astern2@bidmc.harvard.edu

November 2011

Section Theme: Autistic Disorders
Guest Section Editor: Arshya Vahabzadeh, M.D.
arshya.vahabzadeh@emory.edu

December 2011

Section Theme: Sleep
Guest Section Editor: Dawn Flosnik, M.D.
pitt2psu@gmail.com