clarifying whether our case was incidental or because of a teratogenic effect of olanzapine, and the limitations of a single case report need to be taken into consideration.

References

1. Littrell KH, Johnson CG, Peabody CD, Hilligoss N: Antipsychotics during pregnancy. Am J Psychiatry 2000; 157:1342
2. Mendhekar DN, War L, Sharma JB, Jiloha RC: Olanzapine and pregnancy. Pharmacopsychiatry 2002; 35:122–123
3. Kirchheiner J, Berghofer A, Bolk-Weischedel D: Healthy outcome under olanzapine treatment in a pregnant woman. Pharmacopsychiatry 2000; 33:78–80
4. Neumann NU, Frasch K: Olanzapine and pregnancy: 2 case reports. Nervenarzt 2001; 72:876–878
5. Nagy A, Tenyi T, Lenard K, Herold R, Wilhelm F, Trixler M: Olanzapine and pregnancy. Orv Hetil 2001; 142:137–138
6. McKenna K, Koren G, Tetelbaum M, Wilton L, Shakir S, Diav-Citrin O, Levinson A, Zipursky RB, Einarson A: Pregnancy outcome of women using atypical antipsychotic drugs: a prospective comparative study. J Clin Psychiatry 2005; 66:444–449
7. Spyropoulou AC, Zervas IM, Soldatos CR: Hip dysplasia following a case of olanzapine exposed pregnancy: a questionable association. Arch Womens Ment Health 2006; 9:219–222; Epub 2006 Jun 8
8. Arora M, Praharaj SK: Meningocele and ankyloblepharon following in utero exposure to olanzapine. Eur Psychiatr; 2006; 21: 345–356. Epub 2006 Mar 20
9. Jablensky AV, Morgan V, Zubrick SR, Bower C, Yellachich LA: Pregnancy, delivery, and neonatal complications in a population cohort of women with schizophrenia and major affective disorders. Am J Psychiatry 2005; 162:79–91

YONATAN YESHAYAHU, M.D., M.H.A.
Jerusalem, Israel

Dr. Yeshayahu reports no competing interests.

This letter (doi: 10.1176/appi.ajp.2007.07010176) was accepted for publication in August 2007.

Complicated Grief: A Case Series Using Escitalopram

TO THE EDITOR: The syndrome of complicated grief is not formally recognized in DSM-IV, but it is associated with significant functional impairment and distress (1). A grief-focused psychotherapy, complicated grief therapy, recently demonstrated efficacy for complicated grief in a randomized controlled trial (1). To our knowledge, there are no randomized controlled trials of pharmacotherapy for complicated grief. An open-label study of paroxetine in combination with a version of complicated grief therapy did not allow determination of medication efficacy beyond that of psychotherapy on grief symptoms (2). Open-label bupropion showed modest effects for grief (3), but nortriptyline demonstrated no significant effect on grief in open-label (4) and randomized controlled trial (5) studies of bereavement-related depression.

We prospectively examined four individuals with a primary diagnosis of complicated grief (defined as a score of ≥25 on the Inventory of Complicated Grief ≥6 months after the death of a loved one) in a 10-week pilot study of open-label escitalopram. The institutional review board of Massachusetts General Hospital approved the study. Participants gave written informed consent and received escitalopram flexibly in doses of 10 to 20 mg daily.

Participants were all female, with a mean age of 41.75 years (SD=14.4). The primary loss was 2.94 years (SD=1.4) prior. Posttraumatic stress disorder (PTSD) (allowing loss as A1 criteria only) was present among 75% of subjects, 75% had at least one other lifetime anxiety disorder, and all had a lifetime major depressive episode (50% current, 50% past). Each patient tolerated titration to 20 mg/day and completed the 10-week study "very much improved" (Clinical Global Impression-Improvement=1). There was a statistically significant mean reduction in Inventory of Complicated Grief (34.5 [SD=6.0] to 8.25 [SD=3.0]; paired t=8.97, df=3, p=0.001), 25-item Hamilton Depression Rating Scale (16.25 [SD=5.6] to 4.00 [SD=2.9]; paired t=7.4, df=3, p=0.005), and Clinical Global Impression-Severity (5.0 [SD=0] to 1.75 [SD=0.5]; paired t=13.00, df=3, p=0.001) scores.

Given the limitations of a small cohort size and open-label assessments, these preliminary results suggest that selective serotonin reuptake inhibitor (specifically escitalopram) pharmacotherapy alone may result in significant improvement without concomitant psychotherapy in individuals with complicated grief and that randomized controlled trials examining pharmacotherapy for complicated grief are needed.

References

1. Shear K, Frank E, Houck PR, Reynolds CF III: Treatment of complicated grief: a randomized controlled trial. JAMA 2005; 293: 2601–2608
2. Zygmont M, Prigerson HG, Houck PR, Miller MD, Shear MK, Jacobs S, Reynolds CF III: A post hoc comparison of paroxetine and nortriptyline for symptoms of traumatic grief. J Clin Psych 1998; 59:241–245
3. Zisook S, Shuchter SR, Pedrelli P, Sable J, Deaciuc SC: Bupropion sustained release for bereavement: results of an open trial. J Clin Psych 2001; 62:227–230
4. Pasternak RE, Reynolds CF III, Schlernitzauer M, Hoch CC, Buysse DJ, Houck PR, Perel JM: Acute open-trial nortriptyline therapy of bereavement-related depression in late life. J Clin Psych 1991; 52:307–310
5. Reynolds CF III, Miller MD, Pasternak RE, Frank E, Perel JM, Cornes C, Houck PR, Mazumdar S, Dew MA, Kupfer DJ: Treatment of bereavement-related major depressive episodes in later life: a controlled study of acute and continuation treatment with nortriptyline and interpersonal psychotherapy. Am J Psychiatry 1999; 156:202–208

NAOMI M. SIMON, M.D., M.Sc.
ELIZABETH H. THOMPSON, B.A.
MARK H. POLLACK, M.D.
Boston, Mass
M. KATHERINE SHEAR, M.D.
New York, N.Y.

Dr. Simon has received research support from Bristol-Myers Squibb, AstraZeneca, Cephalon, Forest Laboratories, GlaxoSmithKline, Janssen, Eli Lilly, NARSAD, NIMH, Pfizer, UCB Pharma, and Sepracor; she has served as an advisor and consultant to Paramount Biosciences and Solvay; and she has served as a speaker for Forest Laboratories, Janssen, Eli Lilly, Pfizer, UCB Pharma, and Sepracor. Dr. Pollack has served on the advisory boards of and as a consultant to Neurogen, Solvay, AstraZeneca, Brain Cells, Inc., Bristol-Myers Squibb, Cephalon, Forest Laboratories, GlaxoSmithKline, Janssen, Jazz Pharmaceuticals, Eli Lilly, Medavante, Neurocrine, Novartis, Otsuka, Pfizer, Predix, Roche Laboratories, Sanofi, Sepracor, Transoral Pharmaceuticals, UCB Pharma, Tikvah Therapeutics, and Wy-

eth; he has received research grants from Bristol-Myers Squibb, Cephalon, Forest Laboratories, GlaxoSmithKline, Janssen, Eli Lilly, NARSAD, NIDA, NIMH, Pfizer, Sepracor, UCB Pharma, and Wyeth; he has also served as a speaker for Bristol-Myers Squibb, Forest Laboratories, GlaxoSmithKline, Janssen, Eli Lilly, Pfizer, Solvay, and Wyeth; and he is a shareholder with Medavante and Mensante Corporation. Dr. Shear has served on the advisory board of or as a consultant to Pfizer and Forest Laboratories; and she has received research grants from Forest Laboratories. Ms. Thompson reports no competing interests.

This letter (doi: 10.1176/appi.ajp.2007.07050800) was accepted for publication in July 2007.

Psychotic Episode Associated With Bikram Yoga

TO THE EDITOR: Yoga is a widely practiced activity thought to benefit various conditions, including psychiatric disorders (1). However, intensive yoga and meditation have been reported in association with altered perceptions and full-blown psychotic episodes (2–4). Bikram yoga, also known as "hot yoga," is a form of yoga copyrighted in 1979 that is based on 26 postures performed in a room heated to 105° F. We report a case of psychosis precipitated by Bikram yoga.

"Mr. B" was a 33-year-old man with a history of brief hallucinogen-induced psychosis, with full interval remission, 10 years before he became psychotic while participating in a Bikram yoga instructors' training seminar lasting several days. In the days leading up to the episode, he felt dehydrated, ate poorly, and slept only 2–3 hours per night. He then developed auditory and visual hallucinations (he reported seeing owls speaking to him, "cat-like slits" in people's eyes, and a cross on his own forehead), paranoia, and a disturbing sense that there was "a battle for control of [his] mind" and that he had "betrayed God." He endorsed racing thoughts, and after feeling increasingly agitated one day, he recited the Lord's Prayer loudly in class and became physically aggressive when confronted, which necessitated involuntary hospital admission. On examination, the patient displayed a flat affect, endorsed ideas of reference and delusional thinking, and was uncharacteristically preoccupied with religious ideation, but he was not manic. Laboratory testing revealed no electrolyte abnormalities, urine toxicology screening was negative, and an electroencephalogram and brain magnetic resonance imaging were normal. The patient was treated with aripiprazole 15 mg/day, with robust improvement in psychosis after 1 week and full resolution by 1 month. Aripiprazole was discontinued, and the patient continued to report feeling "normal" at the 4-month follow-up.

This case demonstrates that while yoga may have physical and psychological health benefits, it is not devoid of side effects. Intensive forms of yoga such as Bikram may in particular have a liability for psychotic decompensation among those individuals who are more psychosis-prone because of stress, sleep and sensory deprivation, and dissociative experiences that can arise from meditation. Castillo (5) reported that the meditative trance experiences among Indian yogis are often characterized by dissociation, hallucinations, and beliefs in possessing supernatural powers. While such experiences are typically labeled pathological by Western clinicians, they can be identified as part of spiritual awakening in Eastern meditative traditions (2, 5). Distinguishing between pathological and culturally sanctioned experiences can therefore be a clinical challenge requiring open-mindedness and sensitivity. In our patient, his experiences were recognized as pathological within the cultural framework in which he practiced yoga, and psychiatric hospitalization and antipsychotic treatment resulted in symptomatic improvement. Clinicians should screen patients for alternative therapies, including yoga, caution patients who are prone to either mania or psychosis against stress and sleep deprivation, and consider the cultural contexts of yoga-induced psychosis in order to fully help their patients in healing.

References

1. Lavey R, Sherman T, Mueser KT, Osborne DD, Currier M, Wolfe R: The effects of yoga on mood in psychiatric inpatients. Psychiatr Rehabil J 2005; 28:399–402
2. Walsh R, Roche L: Precipitation of acute psychotic episodes by intensive meditation in individuals with a history of schizophrenia. Am J Psychiatry 1979; 136:1085–1086
3. Sethi S, Bhargava S: Relationship of meditation and psychosis: case studies. Aust N Z J Psychiatry 2003; 37:382
4. Cahn-Ob T, Boonyanaruthee V: Meditation in association with psychosis. J Med Assoc Thai 1999; 82:925–930
5. Castillo R: Trance, functional psychosis and culture. Psychiatry 2003; 66:9–21

JESSICA S. LU, M.P.H.
JOSEPH M. PIERRE, M.D.
Los Angeles, Calif.

Dr. Pierre is on the speaker's bureaus of Bristol-Myers Squibb, AstraZeneca, and Pfizer. Dr. Lu reports no competing interests.

This letter (doi: 10.1176/appi.ajp.2007.07060960) was accepted for publication in July 2007.