if it has no conceivable relevance.

Ryan and her colleagues have documented an urgently important finding that ought to invite the psychiatric community to ponder the enduring therapeutic utility of level-based behavioral systems.

#### David A. Whelan, Psy.D.

Dr. Whelan is a staff clinician at the Cambridge Health Alliance in Cambridge, Massachusetts, where Collaborative Problem Solving has been adopted as the treatment model on the inpatient child and adolescent psychiatric units. He is also in private practice in Newton, Massachusetts.

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- A more compassionate model for treating children with severe mental disturbances: the Open Arms Program of the Cambridge Hospital Child Assessment Unit, Cambridge, Massachusetts. Psychiatric Services 54:1529–1531, 2003

In Reply: Dr. Whelan raises several important points in his comments about our article. Caregivers, teachers, and hospital staff members often see oppositional behaviors as best met by behavioral contingencies designed to operantly teach adaptive behaviors. Such responses overlook the fact that such behaviors in children and adolescents, who are typically hospitalized because of significant problems with impulsivity, affect regulation, and behavioral dyscontrol, often reflect expressions of frustration, efforts to demonstrate autonomy, a desire for engagement, or some other meaningful interpersonal transaction.

We appreciate Dr. Whelan's noting the importance of considering behavioral management systems as possible catalysts in negative interactions between patients and staff on a unit. We also agree with his observations and conclusion that the transactional nature of patient-staff interactions is typically not addressed in an effective manner. As clinicians who have worked in inpatient settings and have also observed firsthand the limitations of level-based behavioral management systems, we were still surprised by the high rate of assault on staff. In the hospital in which this study took place, there have been ongoing and successful efforts to decrease seclusion and restraint. However, we wonder whether such efforts may inevitably plateau in their success and even have the unfortunate "side effect" of facilitating other forms of dyscontrol within the confines of traditional level-based behavioral management systems.

One of us attended a workshop at the annual meeting of the American Academy of Child and Adolescent Psychiatry in October 2003 (1) in which Ross Greene discussed CPS (2) and its role in eliminating the use of seclusion and restraint in an inpatient setting very similar to the one in our study. One of the many reasons that we perceive the CPS approach to be effective is that it addresses the main reason that people choose to work with difficult children for low pay-to help them. As Dr. Whelan states, CPS "emphasizes discovering the specific pattern of cognitive skill deficits implicated in a given child's inability to comply and works to remediate these deficits." Our observation has been that efforts to address the transactional component between staff and patients often convey to staff that they are doing something "wrong" and that they are somehow inappropriately implementing the otherwise effective unit management program. CPS focuses on therapeutic interactions rather than on limit setting, in which there is inevitably a winner and a loser.

Dr. Whelan suggests that it would have been of value to record "situation-specific, verbatim data" for the verbal reprimands given to patients. Again, he makes a good point. However, such an effort would capture only one element of the transaction in the microclimate of the inpatient unit. There are many other facets of the interaction that would likely affect the transaction, such as a staff member's reputation with patients on the unit, the tone of voice used, the staff member's familiarity with that patient, and the patient's familiarity with the level system.

## Eileen P. Ryan, D.O. Jeffrey Aaron, Ph.D. Virginia Sparrow Hart, Ph.D.

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# Hallucinations With Tolterodine

**To the Editor:** We report a case of anticholinergic delirium that illustrates the importance of assessing patients' cultural and religious beliefs.

An Asian-American octogenarian woman had been taking 4 mg of tolterodine (Detrol LA) every evening for incontinence, a dosage that she had been maintained on for approximately two and a half years. She was admitted to a major military tertiary care center because she had had three or four episodes of loose, bloody stools over a period of approximately a week. Psychiatry was consulted because the patient said she had been troubled by images at night, between 8:30 and 9:00 p.m., while she was in bed. She described these "visions" as those of "spirits" enveloped in clouds. Faces with varying forms seemed to emerge from the shadows of her bedroom and float over the top of her bed. One face in particular was very clear. It was the face of a young man with blonde hair whom the patient did not recognize as anyone she had ever met before. Occasionally when she would ask these images what they were doing in her bedroom, they would "leave." When this did not suffice she would confront them, and they would retire to the shadows once again.

The woman and her husband had tried various things to make these visions stop, such as praying and asking other people to pray for them. Ultimately, because the couple was Catholic, they had a priest come to the house to perform an exorcism. The psychiatric consultation team reviewed the patient's medications and recommended discontinuation of tolterodine. The couple was willing to try this after the team had explained that perhaps these images were related to a side effect of the medication. The medication was stopped, and within two days the hallucinations ceased. The patient was discharged from the hospital three days after the recommendation without any complaint. She and her husband were able to return to a more restorative sleep pattern.

Although delirium and the phenomenon of "sundowning" is a very well-described pattern among elderly persons, little has been written about the effects of tolterodine. One large prospective observational cohort study concluded that the age- and sex-adjusted relative risk of hallucinations with tolterodine compared with that of the anticholinergic drug terodiline, and with ten drugs of other therapeutic classes, was 1.25 and 4.85, respectively (1).

For the consultant psychiatrist, this case report demonstrates the importance of a thorough chart review to uncover a problem that is very common and easily solved, yet one from which this patient had been suffering needlessly for years. Assessment of religious and cultural beliefs also uncovered how this couple was able to accept this suffering, and assessing these beliefs may be significant for them in the future, especially when addressing living wills, hospice care, or other end-of-life issues. Clinicians therefore should be cautious when prescribing anticholinergic medications for elderly patients and should also attempt to understand more about their patients' beliefs and lives.

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# Cotard's Syndrome and Electroconvulsive Therapy

To the Editor: Cotard's syndrome is a delusional disorder that was described by the French psychiatrist Jules Cotard in 1882. It is characterized by intense nihilistic delusion; the patient believes that his or her body has disintegrated or died. The syndrome is always associated with severe depression.

A 61-year-old female patient had been through multiple losses in her life—divorce and the death of both her father and her mother—and lived in a group home with limited social support. She was unable to cope with her emotions and her negative internal state. The patient was very depressed, isolating herself in a dark room, sleeping poorly, and having no appetite. She exhibited a delusion of being dead as an expression of psychic pain or a way of presenting a negative view to the world.

This patient was admitted to the hospital, where she was very depressed, isolating herself in her room, and neglecting her personal hygiene. She spent most of the time lying on her bed in a supine position, her body tightly wrapped with a bedsheet. She lacked vocal inflection and spontaneous facial expression. She denied perceptual disturbances, and she never expressed suicidal ideation, because she believed she had died seven years ago. She stated that her heart had stopped beating, her organs were not functioning, and food was not absorbed by her system.

After organic causes were ruled out (intracranial tumor and infection, thyroid disease, and nutritional deficiency), the patient was started on olanzapine at a dosage of 20 mg daily and escitalopram at a dosage of 10 mg daily for two months. She continued to be severely depressed and delusional. Electroconvulsive therapy was introduced; the patient received six treatments of bilateral electroconvulsive therapy over a period of two weeks, with a range of seizure duration of 43 to 52 seconds. After the second treatment, she stated, "I am alive." On subsequent treatment, she reported a significant decrease in depressive symptoms and stopped stating that she was dead.

At this time the patient was socializing with other patients and participating in therapeutic activities. She was able to sleep for six hours each night, finish 75 percent of her meals, and improve her personal hygiene. The patient was discharged on olanzapine at a dosage of 20 mg daily and escitalopram at a dosage of 10 mg daily. Until electroconvulsive therapy was introduced, the patient had not shown significant improvement in her depression and nihilistic delusion with a combination of antidepressant and antipsychotic medications.

Thus, with electroconvulsive therapy, this patient showed a substantial improvement of her symptoms and has been symptom free for one year since her last discharge.

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