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Message from the Editor: In this issue of the AADMD Reviews & Reports, Dr Zelenski addresses the complex problem of destructive/maladaptive impulsive behaviors, which often occur in persons with severe cognitive dysfunction. Those of us who work with this patient population are intimately familiar with the various types of aggressive, self-injurious, or ritualistic-like behaviors that at times seem to "come-on-out-of-the-blue" with no obvious reason. Since it is "behavior," it makes sense to consult with a psychologist or psychiatrist since "behavior management" is what they do; however, as Dr Zelenski points out "the person with a hammer usually looks for a nail." So for the health professional, if you are a surgeon, you look for the opportunity to operate. If you are a psychiatrist, you think about prescribing a psychotropic drug. And if you are a psychologist, you develop a Behavior Management Plan—because "that's what you do." Dr Zelenski, on the other hand, addressing the behaviors encountered in folks with severe/profound cognitive dysfunction, is asking us to "think out of the box." Using another analogy, the cry of the baby is a non-specific behavior, which could represent hunger, thirst, a wet diaper, boredom, or pain. The caregiver, when confronted with the cry of a baby, goes through a number of diagnostic maneuvers, such as picking the baby up, trying food, checking the diaper, etc. in search of the specific etiology of the behavior. Addressing the specific etiology will resolve the behavior. On the other hand, an injection of haloperidol will also resolve the behavior. In either case, the crying baby, once "treated," will now "sleep like a baby." The question is: what is the most appropriate treatment, a "treatment" based on accurate diagnosis, which specifically addresses the underlying problem, or one that merely suppresses the symptom? Hopefully, the answer to this question is obvious. Unfortunately, clinicians too often take the mindless, non-analytic "symptom-suppression" approach, which at times may have tragic consequences. This is the broader problem Dr. Zelenski is addressing with his excellent case discussion/analysis that follows below.

—Philip May, M.D., Co-Editor, R&R

Gastrointestinal Disorder or Psychosis—A Case Discussion

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THE CASE: David is a 38-year-old gentleman with profound mental retardation. He is fully ambulatory but walks with a somewhat side-to-side, rolling gait. He is 6'1" tall, weighs 185 pounds, and has been accused in the past of "stalking" female staff, making threatening gestures toward female staff, and, in at least one instance, pushing and holding a female staff person inappropriately. Mostly, David isolates from his peers, stares outside, and, at times, can be seen self-stimulating visually by passing his hand in front of his eyes while he looks at a light source. He has ritualistic, collecting behavior, which when interrupted can lead to an attack on the person interrupting the behavior. Staff report that periodically he will present with a "weird" look, making threatening gestures and vocalizations at an unseen person. He also appears to be responding to auditory hallucinations at these times because he cocks his head as if listening and then responds with grunts and hitting out at empty air. His primary care physician reports that he is healthy and has him on no medications. The psychiatrist reports autistic behavior as well as a mood disorder and has David on two mood stabilizers and has continued a first-generation antipsychotic because of previous failed attempts at reducing this medication or

crossing over to second generation antipsychotics.

THE DISCUSSION: Individuals with developmental brain injury often have associated abnormal motility of the gastrointestinal (GI) system. Speech pathologists and respiratory therapists frequently report that oropharyngeal dysfunction and esophageal spasm may lead to chronic pulmonary aspiration. Gastroesophageal reflux is often present secondary to abnormal motility as well as anatomical deformity of the spine. This can lead to G.I. bleeding, esophagitis, and can worsen the effects of chronic aspiration. GI bleeding can be caused by medications (e.g. non-steroidal anti-inflammatory agents, selective serotonin antagonists). Chronic constipation can be caused by: (1) medication (e.g. diphenhydramine, tricyclic antidepressants, neuroleptics, narcotics), (2) immobility (e.g. from contractures, para and quadriplegias), and (3) the underlying brain disorder. Constipation can lead to fecal impaction and volvulus and may also indirectly contribute to an increased risk of pulmonary aspiration. Genetic metabolic disorders can influence the formation of gallstones as well as sensitizing the liver to the toxicities of many medications. This litany of problems which seem to co-occur frequently in individuals with neurodevelopmental disorders is exacerbated by the poor communication abilities, which may also be present because of significant cognitive impairment.

When an individual with impaired communication perceives a problem in their world, they do try to communicate or express it in some way, much as individuals with normal cognition. The problem occurs when the communication is misunderstood. Think of a tourist from Russia who speaks no English trying to tell a blind psychologist who speaks no Russian that he hasn't had a bowel movement for a week. Now imagine that the Russian grabs the psychologist's arm to try to point at the problem. And that's just the beginning of the problem. Soon the psychologist becomes afraid, and the Russian becomes more frustrated. The police are called, and so it goes. The advantage here in comparison to the person with the intellectual disability is that there is a standard language—Russian—and all that needs to be done is to find a Russian interpreter. There is no standard intellectual disability translator. Unfortunately, the literature is full of well-meaning clinicians trying to invent translations for behaviors and even make one-to-one correlations. Thus, "when he begins hitting himself on the ear, he probably has developed an ear infection." Or, "if he starts striking out more at caregivers and is sleeping less, maybe he has a depression." Unfortunately, the best thing that can be said is that these are first guesses, not translations.

But we do know that when people are severely or profoundly mentally retarded with accompanying severe cognitive impairment and their behavior changes, it probably (more than 75% likelihood) represents an undiagnosed medical problem. [1,2] The difficulty continues to be with the translation. Most clinicians find it reasonable to believe that when a person hits at an area, it represents some communication that the part is bothering the person. Or even that increased irritability, insomnia, and eating habit changes represent a changed medical status. But most clinicians who have a hammer, look for nails. So the psychologist sees a repetitive behavior that seems to be environmentally associated and develops a plan to discourage that behavior and replace it with one that is more reinforcing of "healthy" behavior. And the psychiatrist sees increased violence and sleeplessness that occurs on a cyclical basis and starts a mood stabilizer. And sometimes these interventions work or work for a while, so the clinician is now subject to the rule of "intermittent positive reinforcement." We know that the variable ratio schedule produces both the highest rate of responding and the greatest resistance to extinction (an example would be the behavior of gamblers at slot

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For CME Credit read the editorial above and the article below and complete the Content Test and CME Evaluation Form at the end. Please read "Information and Instructions" following the article.

Specific learning objectives for this CME activity (please refer to general objectives).

Upon completion of reading of this article the learner will be able to:

1. Explain the extent of medical causes of apparent psychiatric symptoms in people with severe cognitive impairment.

2. Describe the challenges to determining gastrointestinal etiology of behavioral symptoms.

3. Describe a specific case in which constipation masqueraded as psychosis.

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machines). The practicing clinician, not immune to this rule of behavior despite limited success, continues the intervention or even escalates the intervention.

On the less believable side for the clinician are the behaviors which our experience doesn't lead us to accept as representative of communication of pain/discomfort. These are the "psychotic" behaviors, the "depressed" behaviors, the "isolating" behaviors, the "anxious" behaviors, or the seeming "associated-with-a-precursor" behaviors. And then, what about the transference issues? If the person with the intellectual disability is large, muscular, and has a mean affect, will we assume a connection to our previous experiences of threat and project that into our therapeutic recommendations for our patient? (3) In the case above, we have an individual who presents as threatening, at least to women. His advances appear always toward women. He is considered "psychotic" and is receiving medications for his "psychosis."

Let's look at the case follow-up for a moment. The patient's guardian is concerned about the medications as well as the perceived threat to women as the patient is about to be discharged into the community, and the guardian is afraid that a combination of factors may make the patient less likely to succeed. The guardian requests a second opinion. The new psychiatrist evaluates David in a variety of situations and even sees some of the behaviors, which have concerned the staff, including the following of women staff and the "weird" affect. After reviewing the medical chart and examining the patient, the psychiatrist discovers that David has infrequent bowel movements that are described as "large." Currently, David receives a suppository if he hasn't had a bowel movement in three days. The consulting psychiatrist recommends an abdominal film and also a change of diet to encourage more frequent stools as well as the use of a suppository the next time David demonstrates the "weird" behavior. Several weeks later the staff call the consulting psychiatrist to tell him that they made the changes in diet, but more remarkable, they report that at the most recent episode of "stalking," they decided to try a suppository. After David had a bowel movement, the "stalking" did not continue. They also have tried a suppository when David appeared "weird," and after a bowel movement, the unusual affect disappeared. How do we interpret these results? Certainly, giving David some relief of whatever sensations being constipated gave David, changed his interactions with his environment. Is he "psychotic"? We don't know. Is he dangerous? We don't know. But we do know that a certain comfort-related intervention changed his behavior in a way which would probably enable him to be more successful in his life. And also might allow reductions in his medication. Only long-term followup will tell us for sure.

SUMMARY: Whenever an individual with a severe cognitive impairment who is incapable of typical verbal communication develops a change in behavior or even demonstrates a chronic, episodic behavior that seems to interfere with good quality of life, the caregivers should begin to think about medical causation. And high on the list are GI causes. (4) In conclusion, does gastrointestinal disease masquerade as psychosis? Maybe. •

References

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