



Interdisciplinary Management of Behavioral Disorders

Improving symptoms through appropriate treatment strategies.

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Mr. W was an 85-year-old nursing home resident with a history of mental illness. He often wandered around the unit in an intrusive manner, entering other residents' rooms and sometimes taking clothes or other objects. When redirected by staff, he would become hostile, verbally abusive, and occasionally combative. One day nursing staff heard screaming coming from a resident's room, ran down the hall, and found Mr. W trying to pull a frail resident out of bed.

Behavioral disorders and/or psychiatric symptoms are common among residents of long-term care facilities. Caring for residents with behavioral disorders and psychosis presents a variety of challenges, not the least of which is the level of coordination needed among long-term care staff. Without an organized team approach to treatment, behavioral management is difficult if not impossible in these patients, who frequently have comorbid conditions. These can further complicate the process of identifying and treating the root causes of problem behaviors.

Ideally, the medical director will take the lead by organizing a comprehensive treatment plan for each patient. This should include regular screening for behavioral disorders, such as agitation, resistance to care, verbal abuse, and aggression. Clinicians who should be involved in treatment planning include geriatric psychiatrists, psychologists, consultant pharmacists, directors of nursing, social workers, therapists, unit nurses, and aides. All offer unique insights, such as

the unit nurse's daily observations of the patient's behavior or the geriatric psychiatrist's recommendation for therapy. These members of the team must be encouraged to provide

surveillance and feedback regarding the patient's condition and the effects of treatment regimens.

Reducing Symptoms

During the assessment of behavioral disturbances, it is critical for team members to identify and prioritize target symptoms. Although remission is the goal, a more reasonable expectation may be to reduce the number or intensity of certain symptoms. Sometimes an improvement in a single but particularly troublesome symptom may be sufficient to reduce the patient's level of acuity. For example, decreasing a patient's screaming and verbally abusive language will improve the situation, even if wandering or resistance to care continues.

After recognizing which symptoms are most troublesome and require treatment, the long-term care team must identify and treat any reversible medical, psychiatric, or psychosocial condition causing the patient's behavioral problems or psychosis. In addition, several behavioral strategies may be useful, including distract-

ing the patient and redirecting the behavior, modifying the environment to reduce stress, providing supportive counseling, and increasing participation in therapeutic activities. The diverse perspectives of the interdisciplinary treatment team members can maximize proper selection, integration, and implementation of behavioral approaches.

Case Study

In the case of Mr. W, a team meeting was held to discuss his behavior. Prior to the meeting, the medical director reviewed the resident's medical history and noted that the patient had frequent urinary tract infections. A urinalysis revealed recurrent infection that was subsequently treated with antibiotics. As a result, both Mr. W's nurse and the recreational therapist reported that he was calmer during morning exercises. The social worker observed that Mr. W had been an active athlete as a younger man; the geriatric psychiatrist noted that Mr. W (currently) harbored paranoid delusions. Based on this information, the care team concluded that they needed to primarily target the patient's intrusive and combative behaviors. They suggested a strategy in which staff members would take Mr. W for walks around the facility twice per day to increase his level of physical activity.

This approach helped to significantly improve Mr. W's behavior, but he continued verbally abusing staff and having paranoid delusions. The team gathered again to evaluate its options. At the suggestion of the geriatric psychiatrist, the staff decided that psychotropic medication would be needed to treat his psychosis associated with schizophrenia and reduce his level of aggression.

Pharmacologic Treatment

All atypical antipsychotic drugs are currently approved for the treatment of schizophrenia.

Certain atypical antipsychotics have also been approved in the United States for the short-term treatment of acute manic or mixed episodes associated with bipolar I disorder. While each of these drugs shares the same proposed general mechanism of action, variation in the combination of receptors may lead to subtle differences.¹

When using atypical antipsychotics in older people who likely have multiple medical conditions and are receiving numerous medications, clinicians must be vigilant

for the occurrence of side effects. Among the side effects known to be associated with some or all of the atypical antipsychotic drugs: movement disorders, anticholinergic and antihistaminic effects, weight gain, diabetes, and falls.

Movement Disorders. Antipsychotic-induced movement disorders include extrapyramidal side effects (EPS) and tardive dyskinesia (TD), which have historically been two of the most detrimental effects of this drug therapy. One of the most concerning forms of EPS in older patients is *parkinsonism*, because the characteristic muscle rigidity and bradykinesia can increase patients' risk of falls. Unsightly and irritating abnormal movements that can reduce function and are frequently irreversible signal the occurrence of TD. As a class, atypical antipsychotic drugs are associated with a significantly decreased incidence of both EPS and TD when compared to conventional agents.²⁻⁵

Anticholinergic and Antihistaminic Effects. Both peripheral and central anticholinergic effects can result in significant morbidity among older adults, most notably because of the increased risk of memory impairment and delirium.⁶ Researchers have linked low potency conventional antipsychotics to a high incidence

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of anticholinergic effects.⁷

The antihistaminic effects associated with antipsychotic drug use include sedation and weight gain. Although clinicians sometimes exploit these side effects in long-term care populations to improve sleep or weight loss, the cost may be excessive daytime somnolence, dizziness and increased fall risk, and the masking of underlying reasons for weight loss, such as dental problems, dysphagia, and gastrointestinal disease.

Weight Gain. Almost all atypical drugs have been associated with weight gain, which can impair self-esteem and serve as a reason for noncompliance. There has also been speculation that patients who gain weight may be at increased risk of developing multiple medical comorbidities, including hypertension, type 2 diabetes mellitus, coronary artery disease, osteoarthritis, and gallbladder disease.^{8,9} The etiology of drug-induced weight gain is certainly complex and not well understood, but it may be partially explained by such factors as increased appetite, antihistaminic effects, serotonin antagonism, and increased leptin levels.^{10,11}

Diabetes. The exacerbation of underlying diabetes and the threat of developing new-onset diabetes or diabetic ketoacidosis have emerged as important concerns associated with the use of several atypical antipsychotics. Diabetes poses a significant hazard, leading to an increased risk of myocardial infarction, stroke, retinopathy, neuropathy, and nephropathy.^{12,13} Although more research is needed to completely assess the risk caused by atypical antipsychotics, the FDA has asked all manufacturers of these agents to include a warning in the prescribing information concerning the potential risk of diabetes as an emergent side effect. In particular, long-term care



providers should be aware that people with schizophrenia have an increased risk of developing diabetes that is believed to be unrelated to drug use.¹⁴ Thus, it's important to monitor glucose levels during treatment, and to educate caregivers and staff members about risk factors for diabetes and about the signs and symptoms of hyperglycemia.

Falls. A key safety issue for the interdisciplinary team to consider is whether a particular medication will make the patient more susceptible

to falling. Long-term care residents fall three times more often than their counterparts in the community; moreover, a consistent link has been established between psychotropic medication use and falls.¹⁵ Certain behavioral and mood disorders are also associated with an increased fall risk.

Teamwork

Each member of the interdisciplinary team plays an important role in the optimal management of behavioral disorders and psychosis in residents of long-term care facilities. The main responsibility of the team leader—whether this is the medical director, consulting psychiatrist, charge nurse or nurse practitioner, or another staff member—is to organize and lead the behavioral management process and provide a clear, easy-to-follow plan for assessment and treatment of the problem. All

other team members participate in the process of identifying target behaviors and underlying causes and devising and implementing the most appropriate and comprehensive treatment approach.

The observations of the staff are valuable and can assist in an accurate diagnosis. The bedside caregiver can provide essential information about the patient's reaction to treatment, and the consultant pharmacist can

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be called on to help both patients and prescribing physicians navigate the potential myriad drug interactions and side effects. The mobilization of family caregivers and support networks, and the resources they can provide, such as education and intervention techniques, are also important to the clinical management of behavioral disorders. The combined efforts of the staff and family will likely result in positive outcomes that enhance the patient's quality of care.

References

1. Richelson E, Souder T. Binding of antipsychotic drugs to human brain receptors focus on newer generation compounds. *Life Sci* 2000;68(1):29-39.
2. Maixner SM, Mellow AM, Tandon R. The efficacy, safety, and tolerability of antipsychotics in the elderly. *J Clin Psychiatry* 1999;60(suppl 8):29-41.
3. Jeste DV, et al. Lower incidence of tardive dyskinesia with risperidone compared with haloperidol in older patients. *J Am Geriatr Soc* 1999;47(6):716-9.
4. Jeste DV, et al. Low incidence of persistent tardive dyskinesia in elderly patients with dementia treated with risperidone. *Am J Psychiatry* 2000;157(7):1150-5.
5. Tollefson GD, et al. Blind, controlled, long-term study of the comparative incidence of treatment-emergent tardive dyskinesia with olanzapine or haloperidol. *Am J Psychiatry* 1997;154:1248-54.
6. Flacker JM, et al. The association of serum anticholinergic activity with delirium in elderly medical patients. *Am J Geriatr Psychiatry* 1998;6(1):31-41.
7. Richelson E. Preclinical pharmacology of neuroleptics: focus on new generation compounds. *J Clin Psychiatry* 1996;57(suppl 11):4-11.
8. Blin O, Micallef J. Antipsychotic-associated weight gain and clinical outcome parameters. *J Clin Psychiatry* 2001;62(suppl 7):11-21.
9. Must A, et al. The disease burden associated with overweight and obesity. *JAMA* 1999;282(16):1523-9.
10. Silverstone T, Goodall E. Serotonergic mechanisms in human feeding: the pharmacological evidence. *Appetite* 1986;7:85-97.
11. Casey DE, Zorn SH. The pharmacology of weight gain with antipsychotics. *J Clin Psychiatry* 2001;62(suppl 7):4-10.
12. Expert Committee on the Diagnosis and Classification of Diabetes Mellitus. American Diabetes Association: Clinical practice recommendations. *Diabetes Care* 2002;25(suppl 1):S1-147.
13. Lindenmayer JP, Nathan AM, Smith RC. Hyperglycemia associated with the use of atypical antipsychotics. *J Clin Psychiatry* 2001;62(suppl 23):30-8.
14. Koller EA, Doraiswamy PM. Olanzapine-associated diabetes mellitus. *Pharmacotherapy* 2002;22(7):841-52.
15. American Geriatrics Society, British Geriatrics Society, and American Academy of Orthopaedic Surgeons Panel on Falls Prevention. Guideline for the prevention of falls in older persons. *J Am Geriatr Soc* 2001;49(5):664-72.

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