Ritalin Lifted Dementia-Related Apathy in a 13-Patient Study

Chicago — Methylphenidate may be effective in the treatment of apathy associated with dementia of the Alzheimer type, Dr. Prasad Padala and associates reported in a poster at the annual meeting of the American Geriatrics Society.

Results from an open label study in 13 patients suggest that methylphenidate (Ritalin) has a substantial effect on apathy, with smaller but significant positive effects on mood, cognition, and independence in activities of daily living.

The findings warrant further testing with a double-blind, placebo-controlled trial, he noted.

Apathy is the most common behavior problem reported in persons with Alzheimer’s disease, affecting about 70%-90% of patients. All the patients in the study had dementia of the Alzheimer type, Mini-Mental State Examination (MMSE) scores greater than 18, and Apathy Evaluation Scale (AES) scores greater than 30. Their mean age was 69 years.

All patients were started on methylphenidate 5 mg twice daily; the dose was titrated to 10 mg twice daily over a 2-week period. Follow-up visits were scheduled at 4, 8, and 12 weeks.

Significant improvement in apathy (AES 52.6 vs. 31.6) was reported from baseline over 12 weeks, reported Dr. Padala, of the department of psychiatry at the University of Nebraska, Omaha, and a psychiatrist at the Omaha division of the VA (Veterans Affairs) Nebraska Western Iowa Health Care System.

Less robust but significant improvement was noted at 2 weeks in Geriatric Depression Scale scores, MMSE scores (24.2 vs. 26.7), and Clinical Interview-Based Impression of Change-Plus (CIBIC-plus) at 24 weeks.

The primary analysis was based on the intent-to-treat population using a last-observation-carried-forward analysis at 24 weeks. Categories in the CIBIC-plus analysis were collapsed (1-3 equals improved, 4 equals no change; and 5-7 equals worsened) because the distribution of values was sparse in categories 1, 2, and 7. Dose escalation was significantly superior to placebo on the SIB score at week 24 in the intent-to-treat population (mean difference 5.3), and at weeks 8, 16, and 24 in patients who completed the study. Most reported adverse events were mild to moderate (74%), the most common of which were diarrhea, nausea, and insomnia.

A person who has progressive dementia experiences decline in multiple areas of cognitive function, and eventually manifests significant deficits, usually beginning in occupational functioning progressing to physical function, and eventually affecting self-care. Guidelines developed by the American Medical Directors Association (AMDA) are based on research and expert opinion.

Although the document is aimed at treating long-term care residents, it illustrates a systematic approach to the identification and management of dementia that is applicable to other settings as well.

Assessment
Review all available information and speak with the patient, family, and other caregivers to investigate the patient’s physical, functional, cognitive, and behavioral status. Evaluate any current signs or symptoms of dementia in the patient by performing a formal functional status and cognitive assessment, including, if possible, the observations of an interdisciplinary team. If a patient has many somatic symptoms and performs well on automatic processing tasks (such as writing her name during a meal), depression should be considered as a possible cause or contributor to the patient’s cognitive decline. An altered level of consciousness combined with increasing cognitive impairment can be caused by delirium. Any recent or abrupt changes in the level of consciousness, behavior, or function usually are the result of an acute condition, not dementia.

Evaluate the patient’s risk factors for dementia, such as atherosclerosis, alcohol abuse, or vitamin B12 deficiency. Often a specific cause is undetectable, or the dementia may be so far advanced in the long-term care facility that additional diagnostic testing—beyond a complete blood count, thyroid function test, metabolic screen, B12 level, and erythrocyte sedimentation rate—is not helpful. Tests to consider include imaging studies of the head, a screen for depression, and testing for HIV. Neuropsychological testing or a consultation with a psychologist, psychiatrist, or neurologist may be helpful.

Management
Identify the patient’s strengths and deficits and determine the significance of any deficits, impairments, or symptoms. Concise and accurate documentation by using tools like the Minimum Data Set are encouraged. Treatment should take an interdisciplinary approach that optimizes function and quality of life while capitalizing on the patient’s strengths. Vigilantly address inadequately treated or unrecognized medical conditions, adverse medication effects, and psychological and environmental problems. Socially unacceptable behaviors are a manifestation of disease that can be anticipated and should be accommodated whenever possible. Identifying the triggers for disruptive behavior will allow targeted behavioral interventions that can prevent or help to manage the disruptive behavior. When an individual becomes more impaired, the environment plays an even greater role in the patient’s functional ability. If a patient has a significant condition change, is newly admitted, or was recently hospitalized, medical factors may be contributing to the disruptive behavior. Only when a patient’s impairment leads to excessive disruption or has destructive effects—and after behavioral and environmental management fail—should medication be considered.

Medical Interventions
Before any drug therapy is initiated to treat dementia or disruptive behavior, the goals, risks, and anticipated benefits of therapy should be shared with the family. The use of antihypertensive, antipsychotic, and lipid-lowering agents in multi-infarct dementia may prevent worsening of symptoms. Cholinesterase inhibitors may reduce the rate of cognitive decline and may improve behavioral symptoms in mild to moderate dementia. Memantine is approved to treat moderate to severe dementia of the Alzheimer type. It is reasonable to consider using these agents if the patient’s dementia is consistent with Alzheimer-type dementia. The atypical antipsychotics—risperidone, haloperidol, and divalproex—are used to manage behavior and psychological symptoms in patients with dementia, but these medications have only modest effectiveness and associated risks that make close monitoring necessary.

After initiation of any management, including drug therapy, the patient’s condition must be monitored in order to maximize the beneficial interventions and minimize adverse drug reactions and interventions that may no longer be appropriate or working.

The Bottom Line
AMDA’s clinical practice guideline on dementia—although aimed at long-term care facilities—describes useful steps that can be implemented in all settings to help identify patients who are at risk for dementia and the progression of dementia, as well as steps that can be used to manage dementia. Management is aimed at optimizing the patient’s function and quality of life while minimizing complications and negative consequences of the condition.

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