Criteria for Use of Memantine (Namenda®)

VHA Pharmacy Benefits Management Strategic Healthcare Group, Alzheimer's Disease Workgroup and the Medical Advisory Panel

The following recommendations are based on current medical evidence and expert opinion from clinicians. The content of the document is dynamic and will be revised as new clinical data becomes available. The purpose of this document is to assist practitioners in clinical decision-making, to standardize and improve the quality of patient care, and to promote cost-effective drug prescribing. The clinician should utilize this guidance and interpret it in the clinical context of the individual patient situation.

Introduction

Dementia is a significant cause of morbidity in the elderly population. Memantine, an NMDA receptor antagonist, has been approved for use in moderate to severe Alzheimer's Disease (AD). In ambulatory, community-dwelling patients with moderate to severe AD, memantine demonstrated less functional and cognitive deterioration in comparison to placebo as measured by various rating scales. However, this difference was not apparent in the clinical impression of these changes. The data to date are from relatively short trials, 12-28 weeks in duration. Given the chronic and progressive nature of the disease, longer trials are needed to define the outcomes and benefits of this agent.

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Therefore, based on the limited evidence for benefit and populations studied the criteria below provide guidance on prudent use of this agent:

Patient Selection

- Patients should have documented in their medical record a diagnosis of AD according to the criteria of the Diagnostic and Statistical Manual – IV (American Psychiatric Association, 1994). In addition, the patient should have been evaluated by a neurologist, geriatrician, geriatric psychiatrist or provider experienced in the diagnosis of AD as part of the work-up.
  AND
- Have moderate to severe AD as defined by a Mini-Mental State Exam (MMSE) of less than 15
  AND
- Be able to perform with minor assistance at least one self-care ADL, as defined by toileting, feeding, grooming, ambulation, bathing or dressing.

- Nursing home residents whose admission was due to the progression of their dementia, defined as not being able to perform at least one self care ADL, are not candidates for memantine therapy. Therapy should be tapered and discontinued if currently receiving memantine. Therapy naive patients fitting this description should not have therapy instituted.

- Patients should be considered for memantine monotherapy if they are treatment naïve

Dosing

- Therapy should be initiated at 5mg daily for one week, then 5 mg twice daily for one week, then 5 mg in the morning and 10 mg in the evening for one week followed by 10 mg twice daily as maintenance therapy.

- In patients with a creatinine clearance of <50 ml/min dosage adjustments may be necessary.

- Memantine should not be used in patients receiving dialysis.

- If combination therapy with a CI is considered (patients with moderate to severe dementia and MMSE<15), the patient should be community dwelling, on a stable dose of CI for 6 months and

demonstrate decline or loss of stabilization in clinical status as shown by self-care ADL or other rating tools.

Discontinuation

Memantine therapy should be discontinued in patients who show no clinical benefit in 6 months, when a patient becomes dependent in all self-care ADL or becomes institutionalized due to the severity of their dementia.

Precautions

Memantine is a weak base that is largely renally excreted. Alteration of urine pH to an alkaline state may lead to significant retention of the parent compound. Agents that utilize the same cationic transport mechanism in the renal tubule as amantadine may also inhibit memantine secretion. Possible agents implicated in this mechanism include cimetidine, ranitidine, hydrochlorothiazide, quinidine and triamterene. Careful monitoring should be employed if these agents are used concurrently.

Concomitant use of amantadine, ketamine and dextromethorphan should be avoided due to a theoretical additive effect at NMDA receptors.

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