The pharmacological management of aggression in the nursing home requires careful assessment and methodical treatment to assure maximum safety for patients, nursing home residents and staff. Aggressive symptoms can be verbal, physical or sexual. Severe physical and sexual aggressive behavior may require immediate, intense therapy. The extensive differential diagnosis for aggression in the elderly patient includes delirium, patient discomfort, environmental over-stimulation, patient fear, depression, psychosis and loss of impulse control produced by brain damage. The treatment team must first determine whether the aggression is acute or chronic (See Decision Tree 1, Page 5). For chronic aggression, staff must distinguish intermittent versus continuous (See Decision Tree 2, Page 6).

Numerous behavioral interventions are appropriate for aggressive patients; however, some individuals fail to respond to behavioral management or the episodes of aggression are so dangerous that the treatment team feels compelled to prescribe medications. Rapid sedation of the acutely aggressive, dementia patient can be achieved with IM or PO neuroleptics. Chronic aggressive behavior is sometimes improved with antipsychotic medications, especially when the symptoms result from psychotic beliefs. The patient who believes that he is being attacked, robbed, beaten, and stalked may improve with typical or atypical antipsychotic medications. The newer atypical antipsychotic medications have fewer side-effects but these medications do not have injectable forms. All antipsychotics may lessen these symptoms and improve behavior.
Patients with significant depression or anxiety may become aggressive as a consequence of altered mood. Anti-anxiety medications rarely improve long-term aggressive behavior and oftentimes disinhibit or confuse the patient sufficiently that aggressive symptoms worsen. Many demented patients are unable to describe depressive mood and staff must assess behaviors like social withdrawal, weight loss and crying. The depressed, aggressive patient should be treated with appropriate antidepressant medication and alleviation of depressive symptoms may substantially improve anxiety.

The patient with episodic, hostile behavior poses a unique challenge to the long-term care treatment staff. This individual may become physically aggressive once or twice per week without clear warning. These outbursts can sometime become very aggressive requiring interventions by multiple staff and PRN medication. Some patients with intermittent aggression may not respond to behavioral interventions and these individuals may not manifest psychotic or depressive symptoms. Anticonvulsant medications may help curb this episodic, impulsive, aggressive behavior. Valproic acid has been demonstrated to be effective in aggressive elders when blood levels are titrated into the therapeutic range. The standard initiation dose is 250 mg per day (e.g., 250 qhs) with gradual titration to a blood level of 60-100. Dosages can be increased by 250mg per week based on blood levels. The patient should have sustained therapeutic blood level for 2 to 6 weeks prior to determining effectiveness of the medications. Doses that produce blood levels over 100 are rarely helpful and frequently produce complications such as falls. Blood counts should be monitored to avoid drops in platelet counts.

Tegretol can calm the impulsive dementia patient but this anticonvulsant is slightly more sedating than Valproic acid. Blood counts and liver function studies should be completed prior to initiation and dosages can start at 100mg at bedtime.
Tegretol has a short half-life and split dosing helps sustain blood levels. Doses should be titrated in 100mg increments to a blood level between 4 and 8. Blood counts should be monitored on a regular basis to detect neutropenia. Tegretol has several significant side effects including sedation, increased falls and suppression of bone marrow. Occasional patients become hyponatremic, e.g., sodium 120-130. Tegretol may alter metabolism of other cardiovascular medications and your consulting pharmacist can advise your physician on these risks.

The new anticonvulsant gabapentine (Neurontin) is presently used for some psychiatric problems. The efficacy and long-term complication rate from usage of this medication awaits further studies in demented patients with behavioral problems.

Patients who respond to anticonvulsant agents should be treated for at least 6 months. Patients who experience few side-effects from psychotropic medications but demonstrate behavior that concern the treatment team should continue for an additional 6 months prior to dose tapering. Many patients become hostile or combative as a part of delirium and these individuals should be considered for dose reduction at 6 months unless the patient has repeated bouts of delirium. Patients who have re-occurring symptoms following dose reduction should have an additional year of sustained therapy prior to repeat dose discontinuation. The rationale for continued therapy must be documented in the record for medicolegal reasons and these notes prevent problems with nursing home surveyors. Many hostile, impulsive behaviors decline as the patient’s dementia progresses.

Few dementia patients with sexually aggressive behavior are expressing erotic drives. Most aggressive touching or disrobing behavior will not result in sexual intercourse. Some demented patients will climb into bed with other residents but this does not result from sexual desires. Much “sexual” behavior is similar to
activities exhibited by a 16-month old child, i.e., disrobing, touching, self-fondling. Few demented patients are capable of completing a sexual act. Sexually aggressive behavior is treatable like other forms of aggressive behavior.

Aggressive patients who fail to respond to several medications should be referred to a geriatric psychiatry inpatient unit for proper evaluation and psychotropic medication titration. Difficult patients who require complex psychopharmacology such as combinations of antipsychotics, mood stabilizers or use of toxic medications such as lithium, are better managed by an inpatient geriatric psychiatry unit. A typical geriatric psychiatry inpatient unit has a board certified geriatric psychiatrist as the director and geriatric mental health professionals who manage the patients. These units have specialized services with highly-trained professionals who provide detailed assessments and avoid over-sedation or restraints.

A very small number of persistently aggressive patients require substantial sedation to assure individual’s safety. These patients constitute a small fraction of all elderly patients with neuropsychiatric disabilities and such individuals are usually seriously, persistently mentally-ill with a long history of severe aggressive behavior.

Management of aggression requires a careful clinical assessment, behavioral interventions and the sequential use of psychotropic medications. Most aggressive behavior can be managed by a combination of behavioral interventions and psychopharmacology. Treatment-resistant patients should be referred to geriatric psychiatry inpatient units.
DECISION TREE 1
ASSESSMENT OF AGGRESSION
ACUTE ONSET VERSUS CHRONIC SYMPTOMS

ACUTE
(Less than 1 week)
Delirium
No
Environmental Change
No
New Onset Psychosis
No
Depression
No
SHORT TERM NEUROLEPTIC THERAPY AND RE-EVALUATE IN 1-2 WEEKS

CHRONIC
(More than 1 week)
Documented By Staff
Yes
No: Document

Follow Decision Tree #2
DECISION TREE 2

ASSESSMENT OF CHRONIC AGGRESSION
INTERMITTENT VERSUS CONTINUOUS

Intermittent Once or Twice Per Month

- Provoked
  - No
  - Yes: Environmental Manipulation

- Specific Situation or ADL Activity
  - No
  - Yes: Modify Situation or ADL Activity

- Aggression Produces Harm to Self or Others
  - No
  - Yes: Sequential Trial with Medications

- Monitor Status
  - Yes: Sequential Drug Trials
    - Tegretol
    - Valproic Acid
    - Neuroleptic

Refer to Geriatric Center

No

Improved

Yes

Continuous Daily or Weekly

- New Medication
  - No
  - Yes: Stop Medication

- New Pain or Medical Problem
  - No
  - Yes: Treat Pain or Medical Problem

- Environmental Change
  - No
  - Yes: Correct Environment

- Psychosis
  - No
  - Yes: Treat with antipsychotics

- Depression
  - No
  - Yes: Treat with antidepressants

Yes: Correct Environment

Continue for 6 months