

# Pharmacological Treatment of Depression in the Elderly Nursing Home Resident

Depression is a biological brain disorder that is common in nursing home residents and occurs in 7-12% of all individuals over the age of 65. Specific groups have a much higher rate of depression including the seriously medically ill (20-40%), idiopathic Parkinson's patients (30-40%), post-stroke patients (50%), and Alzheimer's patients (30%). Antidepressant medications are effective in 70% of elderly depressed patients with appropriate diagnosis and medical management. Unrecognized depression leads to higher medical costs and higher risk of death from cardiac or cerebrovascular disease. Appropriate recognition and treatment of depression is monitored by nursing home surveyors. The first step in proper treatment of depression is accurate diagnosis.

Recognition of depression in the elderly patient can be difficult. The differential diagnosis of depression includes delirium, dementia, stroke and unrecognized medical problems. Specific neurovegetative symptoms to include sleep disturbance, loss of appetite, lack of energy and loss of concentration are usually present in addition to lowered mood. Any patient with unexplained weight loss should be evaluated for depression. Many elderly patients have increased physical complaints such as persistent unexplained abdominal problems, severe arthritis, etc., and depression should be considered in any elderly patient who "constantly whines". Depression is a common cause of weight loss in nursing home patients. Elderly depressed patients may become psychotic, appear demented (pseudodementia) or begin to yell or scream. Psychotic

symptoms respond to neuroleptics. Antipsychotic medication can be tapered following resolution of depressive episode and meet OBRA guidelines. The clinician should exclude medical causes of depression including thyroid disorder, azotemia, and medications that lower the patient's mood. Drugs such as Aldomet and steroids can cause elderly patients to appear depressed.

Patients manifesting depressive symptoms unrelated to medical causes should undergo a trial of antidepressants. Two commonly utilized classes of medications include selective serotonin reuptake inhibitors (SSRI's) and tricyclic antidepressants.

Multitudes of serotonin reuptake inhibitors are available for the patients (See Table at Back). The overall efficacy of each medication in the elderly is roughly equivalent; however, significant differences exist in drug half-life, effect on the P450 system and cost. Most physicians become familiar with one or two SSRI's and utilize these medications in most patients. The SSRI's lack reliable blood levels to determine efficacy and dose titration is required in many newer antidepressant medications.

The SSRI's can alter the P450 system, a series of liver enzymes that metabolize a broad range of medications including cardiovascular drugs. The addition of an SSRI may significantly alter antihypertensive and anti-arrhythmic blood levels and produce toxicity from either too little or too much medication. The treating clinician should understand the effect of each SSRI on cardiovascular drugs to monitor for potential side effects. Consulting pharmacists should provide this type of data during a consultation.

Drug half-life is important for dosing schedule and titrations. Several SSRI's require minimal titration including Prozac, Paxil and Remeron. Other drugs such as Zoloft and

Effexor require careful upward adjustment of medication to assure desired therapeutic effect.

There are no injectable antidepressants for those patients unable to take oral medications. Prozac has a liquid preparation that is injectable via PEG or NG tube; a distinct advantage for this medication. Many of the newer antidepressants are very expensive and patients are often unable to afford these medications. Nursing homes now scrutinize pharmacy expenses and patients on expensive combinations of antidepressants present financial burdens to long-term care facilities using the PPS (Perspective Payment System).

The ideal SSRI is: 1) a relatively inexpensive medication with a 2) relatively short half life 3) that produces minimum side effects and 4) has minimum effect on the metabolism of other cardiovascular drugs. The particular categories are displayed in Table 1 and clinicians can choose which combination they feel most comfortable with. The other associated side effect with SSRI's vary according to medication and dosing range. The cardiovascular effect of SSRI's is minimal and significantly less than tricyclic antidepressants like nortriptyline. The SSRI's as a class may produce akathisia, a side-effect commonly seen in neuroleptics. The SSRI's can be used in combinations with antipsychotics, mood stabilizers and antianxiety medications. These medicines are also effective in patients receiving anti-Alzheimer's medications like Aricept.

Conventional medical wisdom endorses the use of SSRI's as a first line drug in the treatment of depression in the elderly. The safety and efficacy of these medications has been demonstrated in patients over the age of 65 as well as those with significant cardiovascular disease or individuals with complicated medical problems such COPD

and cancer. These medications are effective in lowering anxiety in patients; however, they are not as effective for treating chronic pain as the tricyclic antidepressants.

Nortriptyline (Pamelor) is the most effective tricyclic antidepressant with the least anticholinergic side-effects. Doses beginning from 30-50 mg per day can be used at bed time to assist sleep. Blood levels should be checked every week and the dose titrated to a blood level of 70-100. The antidepressant should be continued for six weeks to determine efficacy. Avoid Elavil in the elderly since most patients over age 65 will become confused or delirious from this medication. Patients with significant cardiac conduction problems may be at risk for heart block with tricyclic antidepressants. Overall, therapeutic doses of Pamelor are well tolerated by even the frail elderly patients since Pamelor does not disrupt sleep or appetite. A nighttime dose may improve sleep disturbance.

Multiple classes of antidepressants are available. Monoamine oxidase inhibitors (MAOI's) are effective in elderly patients but these drugs have multiple toxicities that require careful monitoring and prescription by a specialist. Patients who fail a six-week trial with one antidepressant and then fail with a second antidepressant from a different class should be referred for evaluation to a geriatric psychiatrist or a general psychiatrist with experience managing elderly patients. Electroconvulsive therapy is indicated for treatment-resistant depression because ninety percent of depressed patients over age 65 improve with appropriate therapy.

Depressed patients should not be allowed to seclude themselves in their room. Sensory deprivation worsens depression and accelerates cognitive loss. The nursing and recreational staff should coordinate efforts to maintain the intellectual, physical and spiritual vitality of patients. Psychotherapy can be helpful and pastors should continue to visit these individuals.

Anxiety is a common symptom associated with depression that will lessen when mood symptoms improve. Treating anxiety with benzodiazepines (e.g., Xanax, Valium) can be hazardous in the elderly since all such drugs can cause confusion, delirium and falls. Long-term benzodiazepine prescription for the elderly should be avoided except as a last resort. Patients with severe therapy-resistant anxiety disorder should be referred to psychiatrist with geriatric expertise for evaluation and further treatment. The community health center may provide psychotherapy to cognitively intact residents with depression.

Maintenance therapy with antidepressant medication is appropriate for up to two years following the complete elimination of depressive symptoms. Patients with severe life-threatening depression may remain on antidepressants for many years. Antidepressant medications are not addictive but SSRI's should be tapered to prevent unpleasant rebound symptoms. Patients receiving antidepressant medications should have a note every six months to confirm the indications for the medication, side effects and long-term plans for discontinuation.

Depression is a common disorder in the nursing home. Effective treatment will improve symptoms, sustain function, and maintain quality of life for residents.