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ELDER CARE

A Resource for Interprofessional Providers

Depression in Older Adults – Pharmacotherapy

Jeannie Kim Lee, Pharm D, BCPS, College of Pharmacy, University of Arizona

Depression in older adults is a common, but frequently underdiagnosed and undertreated, condition. Depression extends beyond the personal suffering of an older patient, it can also result in family disruption, increased use of healthcare services, a decline in functional abilities, and increased risk of death from suicide.

A previous edition of Elder Care entitled "Depression in Older Adults" reviewed the epidemiology, risk factors, and diagnosis of depression. This edition focuses on pharmacotherapy with antidepressant medications.

There has been limited research on the use of antidepressant medication in geriatric populations, as the majority of clinical trials of antidepressants have been conducted in younger individuals. Thus, clinicians have to extrapolate from studies conducted in younger individuals who do not exhibit the co-morbidities and polypharmacy that often complicate treatment decisions for older patients. Available research does, however, show that older adults benefit most from aggressive treatment - meaning treatment that is started early (within 2 weeks) and continued longer than in younger adults.

Management Goals

The goals for treating geriatric depression include symptom resolution, relapse prevention, enhanced functional capacity, lower risk of suicide, and reduced use and costs of health services. Treatment should be individualized based on: (1) history of depression, (2) past response, (3) severity of illness, (4) concurrent diseases and medications.

For example, if a patient has a history of depression and reports past response to a particular agent, consideration should be given to prescribing that same medication again. Similarly, if there is a family history of depression, the antidepressant response of family members should be considered in selecting a medication for the patient's current episode of depression.

Severity of disease is also a consideration. Although combination therapy with multiple antidepressants should generally be avoided to reduce the risk of adverse drug effects, combination therapy may be needed for severe episodes of depression. Finally, concurrent disease, such as conditions causing chronic pain, should be managed effectively, and if the patient is taking a medication that can cause depression (see Table 1), the need for such medication should be frequently reassessed and the drug discontinued, when possible.

Table 1. Medications That Can Cause Depression

Class	Examples
Antibiotics	ampicillin, dapsone, isoniazid, metronidazole, nitrofurantoin, sulfonamides, tetracycline
Anticonvulsants	carbamazepine, ethosuximide, phenobarbital, phenytoin, primidone
Antihypertensives	clonidine, methyldopa, propranolol
Anti-Parkinsons	amantadine, bromocriptine, levodopa
Antipsychotics	fluphenazine, haloperidol
Cardiac medications	digoxin, procainamide
Chemotherapies	azathioprine, bleomycin, cisplatin, cyclophosphamide, doxorubicin, vinblastine, vincristine
Gastrointestinal agents	cimetidine, metoclopramide, ranitidine
Hormones	glucocorticoids, estrogen-progestin
Sedatives/anxiolytics	barbiturates, benzodiazepines
Stimulant withdrawal	amphetamines, caffeine, methylphenidate

TIPS FOR ANTIDEPRESSANT THERAPY IN OLDER ADULTS

- Recognize and treat early to alleviate overuse of health services.
- Assure an adequate trial (at least 6 weeks) after titrating first-line agent to therapeutic dose.
- Avoid combination regimen if possible to reduce the risk of adverse effects.
- Work with psychiatrists, psychologists, counselors, pharmacists, and social workers on pharmacotherapy, counseling, self-care, behavioral changes, support systems, etc.

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Pharmacotherapy

Up to 75% of depressed older patients respond to pharmacotherapy. A guideline for treatment of late-life depression was developed by the Prevention of Suicide in Primary Care Elderly: Collaborative Trial (PROSPECT) group. The recommended first-line antidepressant is a selective serotonin reuptake inhibitor (SSRI). The initial dose should be half the usual adult dose, with slow titration to the target dose, if tolerated.

If an adequate response to a first-line drug is not seen after at least 6-8 weeks of therapy at target dose, then switch to a different first-line agent or to a second-line agent (see Table 2). Third-line drugs, such as aripiprazole (Abilify) and buspirone (Buspar), are reserved for augmenting the response to a first- or second-line therapy. Drugs to be avoided in older adults are listed in Table 3. Consider co-management with a behavioral expert.

To prevent relapse, continue therapy for 6 months after initial remission. Patients at high risk for relapse (those who have had two or more depression episodes, or depression lasting more than two years) need continued therapy for at least two years. Many clinicians would recommend indefinite treatment.

Table 3. Antidepressants to Avoid in Older Adults

Medication	Problems in Older Adults
Amitriptyline (Elavil)	anticholinergic, sedating, hypotensive
Amoxapine	anticholinergic, sedating, hypotensive, extra-pyramidal side effects.
Doxepin (Prudoxin)	anticholinergic, sedating, hypotensive
Imipramine (Tofranil)	anticholinergic, sedating, hypotensive
Maprotiline	seizure, rash
Protriptyline (Vivactil)	anticholinergic, can be stimulating
St. John's Wort	multiple drug interactions including SSRIs, photosensitivity at 2-4g/day
Trimipramine (Surmontil)	anticholinergic, sedating, hypotensive

Table 2. Commonly Used Antidepressants: Initial Geriatric Dose, Target Dose, and Geriatric Considerations

First-Line Medications	Initial Dose	Target Dose	Geriatric Considerations
Citalopram (Celexa)	10-20 mg	20-60 mg	Fewer adverse effects compared to other agents; GI distress may limit adherence; may cause weight gain or loss; decreased sexual function possible; generic available
Escitalopram (Lexapro)	5-10 mg	10-20 mg	Fewer adverse effects compared to other agents; GI distress may limit adherence; may cause weight gain; decreased sexual function possible; more costly, no generic
Fluoxetine (Prozac)	5-10 mg	20-60 mg	Last-line among SSRIs due to long half-life (parent drug and metabolite); CNS effects, GI distress, hyponatremia, sexual dysfunction possible; weight gain or loss; generic available
Paroxetine (Paxil)	5-10 mg	10-40 mg	More adverse effects compared to other SSRIs - CNS effects, ACH side effects, GI distress, tremor, hyponatremia, sexual dysfunction possible; weight gain or loss; generic available
Sertraline (Zoloft)	25 mg	50-200 mg	Less adverse effects compared to other agents; GI distress, sexual dysfunction and tremor may limit adherence; may cause weight gain or loss; generic available
Second-Line Medications			
Bupropion (Wellbutrin)	50-100 mg	300-450 mg	Mild GI distress possible; no effect on sexual function; effective for smoking cessation; CNS effects, tachycardia and weight loss may limit adherence; generic available
Duloxetine (Cymbalta)	20 mg	40-60 mg	CNS effects, ACH side effects, GI distress may limit adherence; weight loss and decreased sexual function possible; more costly, no generic
Mirtazapine (Remeron)	7.5 mg	15-45 mg	Severe sedation (effective in concurrent insomnia), ACH side effects, Hypotension, and large weight gain (effective in concurrent anorexia) can be seen; generic available
Venlafaxine (Effexor)	25-75 mg	75-225 mg	CNS effects, ACH side effects, GI distress, and dose-related hypertension may limit adherence; weight loss and decreased sexual function possible; generic available

CNS = central nervous system, ACH = anticholinergic side effects, GI = gastrointestinal

References and Resources

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The University of Arizona, PO Box 245069, Tucson, AZ 85724-5069 | (520) 626-5800 | http://aging.medicine.arizona.edu

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