

Psychotropic, CNS-active medications with potential for falls, confusion, and orthostatic hypotension

Problem: Benzodiazepine use with confusion or falls during last 3 months

Goal: Stop benzodiazepine or reduce dose to minimum tolerated by the patient, with substitution of intermediate for long-acting drugs.

Solution:

1. Collect clinical details

- ✓ Clarify the indication/diagnosis for drug use.
- ✓ What is the pattern of the patient's benzodiazepine use? (Which compounds, how much, how often and for how long).
- ✓ Does the patient take any other drugs with psychomotor effects? Is the patient complaining of dizziness and/or sedation?
- ✓ What is the nature of the patient's confusion? (e.g. difficulty in focusing attention, disorganized thinking, disturbance of consciousness; do any of these seem to fluctuate?) Is there a diagnosis of dementia or hx of cognitive impairment?
- ✓ Assess daily alcohol use, eg. what type, how much, how often, when?

2. Inform the physician

- a. Ask if physician would like to reassess patient
- b. Ask if, patient willing, you should try a gradual taper

3. Ask for follow-up instructions

- a. Determine in what circumstances physician would want to re-evaluate patient?
- b. Assess progress of taper, as instructed by physician
- c. Monitor signs of confusion and withdrawal symptoms
- d. If evidence of problems, schedule visit with physician

4. Discuss with patient/caregiver

- a. Discuss the hazards of benzodiazepines
- b. Discuss alternatives
- c. If the patient has a history of falls, discuss fall safety
- d. If agreed to by physician, ask if patient/caregiver is willing to consider a taper?
- e. Warn of withdrawal symptoms

Background Information

Facts:

1. The most common side effects of benzodiazepines are related to depression of the central nervous system and include:
 - Drowsiness
 - Confusion
 - Gait disturbance
 - Dizziness
 - Impaired motor coordination
2. Benzodiazepines are metabolized primarily in the liver. In general, hepatic metabolism slows as people age, although in many older adults, BZDP are cleared by the liver as well as in younger patients. Elderly persons may experience increased toxicity from side effects as a result of delayed elimination. Much of the prolonged duration is due to age-associated increases in body fat. Another issue related to long-acting agents is the presence of multiple active metabolites.
3. Long-acting benzodiazepines are more likely than short-acting benzodiazepines to produce serious side effects in elderly persons because of their longer elimination half-life.
4. Elderly persons using benzodiazepines may have two to three times the risk of falls and two times the risk of hip fracture when compared to elderly nonusers. These rates are increased in women and especially in women 65 years of age or older. Moreover, women also have two to three times as many hip fractures as do men.

Guidelines for Use:

- Benzodiazepines should only be used for short term management of sleep problems and anxiety particularly during stressful or transitional events, and should otherwise be avoided.
- Shorter-acting benzodiazepines should be used in preference to longer-acting compounds.

Long-acting Benzodiazepines		Shorter-acting Benzodiazepines	
Generic Name	Trade Name	Generic Name	Trade Name
chlordiazepoxide	Librium	alprazolam	Xanax, Xanax XR
chorazepate	Tranxene	lorazepam	Ativan
clonazepam	Klonopin	oxazepam	Serax
diazepam	Valium	temazepam	Restoril
flurazepam	Dalmane	triazolam	Halcion
halazepam	Paxipam	estazolam	Prosom
prazepam	Centrax		
quazepam	Doral		

- Small doses should be used.
- Avoid use with confused or demented patients.
- Be aware of potential interactions with other CNS-depressants (alcohol, other hypnotics, sedatives, narcotic analgesics).
- When used as a hypnotic, the drug should be taken an hour before bed-time; Xanax & Halcion should be taken no more than 15 minutes before bedtime, due to very rapid onset. Repeated doses should generally be avoided and should not be repeated for at least an hour.

Guidelines for withdrawal:

- Benzodiazepines should not be stopped abruptly if they have been taken regularly for more than a few weeks. Abrupt withdrawal may cause confusion, psychosis and convulsions. Patients also may experience rebound anxiety and insomnia.
- A gradual taper should be used during dose reduction or discontinuation of drug with close patient monitoring. A flexible approach is important, tailoring the rate of withdrawal to the patient's symptoms. This may take six to eight weeks or even longer.
- Aim to reduce the dose by approximately 1/4 - 1/2 every 2 weeks, as tolerated by the patient. A pharmacist can advise about suitable doses and formulations; a pill cutter may be helpful if appropriate formulations are not available. After 2 weeks on the lowest available dose, the drug can be stopped completely.

- If the patient is unable to tolerate stopping the drug entirely, the lowest possible dose of one of the shorter acting benzodiazepines is suggested (e.g. temazepam 7.5 mg as a hypnotic or lorazepam 0.5mg for anxiety).

References:

1. Ensrud KE, Blackwell TL, Mangione CM, et al. Central nervous system-active medications and risk for falls in older women. *Journal of the American Geriatrics Society* 2002;50(10):1629-37.
2. American Medical Association. *Drug Evaluations Annual* 1995
3. Salzman C. *Clinical Geriatric Psychopharmacology*. 2nd ed. Baltimore: Williams & Wilkins, 1992.
4. Tideiksaar R. Preventing falls: Home hazard checklists to help older patients protect themselves. *Geriatrics* 1986; **41**: 26-28.
5. Ray WA, Griffin MR, Downey W. Benzodiazepines of long and short elimination half-life and the risk of hip fracture. *JAMA* 1989; **262**: 3303-3307.
6. Ray WA, Griffin MR, Schaffner W, et al. Psychotropic drug use and the risk of hip fracture. *New Eng J Med* 1987; **316**: 363-369.

Problem: Benzodiazepines

Solution Step 2 - Informing the Physician

Patients identified by the study screening procedures have a potential medication problem. However, we do not know everything about the patient and their medical history, and there may be good clinical reasons for the physician to have prescribed for the patient as s/he did. The physician may be aware of the potential problem, but have chosen that treatment as the best compromise for that particular patient.

He/she may be alarmed that the patient has been identified as having a problem, feel defensive because his treatment is being called into question and be worried about patient complaints and litigation. Tact and diplomacy are therefore extremely important.

Before calling the physician, rehearse what you are going to say with the study pharmacist.

Suggested approach:

1. Introduce yourself and tell the physician the name of the patient you are calling about.
2. Explain why you are calling.

I'm calling you about your patient X (patient's name). We are taking part in a study in which home-health patients are screened for problems that may be related to their medication. You may remember receiving a letter informing you that the study was going on.

X has been identified by the study screening procedure. This does not mean that X necessarily has a medication problem, but simply that it would be worth re-evaluating him/her. I'd like to discuss the case with you to see if you think it is worth pursuing further.

3. Describe the identified potential problem.

The screening showed X has symptoms of confusion and/or has had a fall in the past 3 months (as appropriate) and is taking (drug name), a benzodiazepine that studies have shown can cause psychomotor problems.

4. Proceed with the remainder of the discussion according to the guideline and the category to which the patient belongs.

Guidelines for Sleep Hygiene

1. Encourage patient to reduce daytime napping.
2. When approved by the physician, instruct patient to include regular periods of daily exercise at the level appropriate for that patient.
3. Encourage patient to eliminate drinks and food containing caffeine from late afternoon and evening menus (caffeinated coffee and tea, chocolate, and caffeinated sodas).
4. Remind the patient that elderly persons need fewer hours sleep. Remind patient not to set a bedtime which is too early.
5. Encourage the patient to create a relaxing bedtime routine such as a warm bath or snack.

Guidelines to Prevent Falls in the Home

Problem

Lighting

- Too dim
- Too direct, glare
- Inaccessible light switches

Carpets, rugs

- Torn
- Loose

Thresholds

- Too high

Furniture

- Obstructs path
- Improper height

Chairs, tables

- Unstable
- Lack of armrests

Kitchen

- High shelves, cabinets
- Wet or highly polished floor

Bathroom

- Slippery tub area

Correction

- Provide ample lighting in all areas; use night-lights in bedrooms, bathrooms, hallways, and stairwells.
- Evenly distribute light; use indirect light; or translucent shades.
- Wear sunglasses to reduce glare when outside.
- Make switches or lamps accessible upon entering room and at both top and bottom of stairways.

- Repair or replace.
- Add nonskid backs; use double sided tape; or tack down to prevent curling. Remove throw rugs.

- Remove or replace with threshold $\leq \frac{1}{2}$ inch high.

- Rearrange furniture to clear pathways. Avoid cluttered hallways. Tape electrical cords to floor or wall. Coil extra cord and tie securely.
- Use furniture which is at a height for easy lowering and rising by patient.

- Use furniture that supports weight of person leaning on table edges or chair arms and backs. Repair unstable legs and avoid furniture with wheels.
- Use chairs with armrests that extend forward for leverage during rising and lowering.

- Keep frequently used items at waist level or a level which is easy for patient to reach.
- Place rubber mat or nonskid strips in sink area; use nonslip wax; do not buff floors. Clean up spills immediately.

- Add nonskid strips or rubber mat to tub and area around tub. Use shower shoes or bath seat.

- Side of bathtub used for support
- Unstable towel racks, sink tops
- Low toilet seat
- Install portable grab bar on side of tub or inside of shower area.
- Do not use towel racks for support during transfer or ambulation. Add handrails by securing into wall studs.
- Install raised toilet seat

Stairways

- Poor handrails
- Slippery steps
- Improper height or width
- Anchor cylindrical rails firmly 1½ inches from wall. Install handrails on both sides of the stairways. Rails should extend beyond top and bottom step.
- Add nonskid tread on all steps.
- Make sure step height is even and no greater than 8". Make sure width of steps is not less than 10". Mark first and last step with brightly colored tape.

Footwear

- No tread
- High heel
- Poorly fitted shoes
- Use shoes and slippers with tread such as tennis shoes or walking shoes.
- Use shoes with low even heels.
- Use well fitting shoes which stay on feet and do not slip at the heel.

Problem: Diphenhydramine (Benadryl®) and Doxylamine (Unisom®) use with dizziness, falls and or confusion

Goal: Minimize antihistamine use: discontinue OTC hypnotic use, and switch to prescription sedative-hypnotic if appropriate

Solution:

1. Collect clinical details

- ✓ What is antihistamine drug being used for? (Sleep, urticaria (rash), allergies)
- ✓ Does the patient take any other drugs with psychomotor effects? Is the patients complaining of dizziness and/or sedation or drowsiness?
- ✓ What is the nature of the patient's confusion if present? (e.g. difficulty in focusing attention, disorganized thinking, disturbance of consciousness; do any of these seem to fluctuate?)

2. Inform the physician

- a. Ask if physician would like to reassess patient
- b. Ask if, patient willing, you should change to prescription sedative-hypnotics or non-sedating antihistamines

3. Ask for follow-up instructions

- a. Determine in what circumstances physician would want to re-evaluate patient?
- b. Monitor signs of confusion
- c. If evidence of problems, schedule visit with physician

4. Discuss with patient/caregiver

- a. Discuss the hazards of OTC sedative-hypnotics
- b. Discuss alternatives
- c. If the patient has a history of falls, discuss fall safety
- d. If agreed to by physician, ask if patient/caregiver is willing to consider a prescription sedative-hypnotic or a non-sedating antihistamine

Background Information

Facts:

1. The most common side effects of the 2 commercially available OTC sedative hypnotics include:
 - Drowsiness
 - Confusion
 - Gait disturbance
 - Dizziness
 - Impaired motor coordination
 - Anticholinergic side effects (dry eyes & mouth, urinary retention, constipation)
 - Worsening of confusion in patients with dementia
2. OTC sedative-hypnotics may worsen dementia caused by depleting acetylcholine in the brain.

Guidelines for Use:

- Any OTC sedative-hypnotic (diphenhydramine, doxylamine) should be discontinued
- Physician should assess if patient truly needs a sleeping agent
- If needed physician may choose Ambien®, Sonata®, or Restoril®, a benzodiazepine known not to accumulate due to the decreased hepatic metabolism in the elderly. Other sedatives to be considered as hypnotics are lorazepam (Ativan®) or Serax®.
- If using antihistamine to treat emergency allergic reactions, it should be used in the smallest possible dose
- If needing an antihistamine to treat allergies, use prescription non-sedating antihistamines like Allegra® and Clarinex® or OTC Claritin®

References:

1. Fick DM, Cooper JW, Wade WE, et al. Updating the Beers criteria for potentially inappropriate medication use in older adults: results of a US consensus panel of experts. *Archives of Internal Medicine*. 2003;163(22):2716-24.
2. *Tarascon Pocket Pharmacopeia 2004 Deluxe Edition*. Tarascon Publishing, 2004.

Problem: OTC sedative-hypnotics

Solution Step 2 - Informing the Physician

Patients identified by the study screening procedures have a potential medication problem. However, we do not know everything about the patient and their medical history, and there may be good clinical reasons for the physician to have prescribed for the patient as s/he did. The physician may be aware of the potential problem, but have chosen that treatment as the best compromise for that particular patient. He/she may be alarmed that the patient has been identified as having a problem, feel defensive because his treatment is being called into question and be worried about patient complaints and litigation. Tact and diplomacy are therefore extremely important.

Before calling the physician, rehearse what you are going to say with the study pharmacist.

Suggested approach:

1. Introduce yourself and tell the physician the name of the patient you are calling about.
2. Explain why you are calling.

I'm calling you about your patient X (patient's name). We are taking part in a study in which home-health patients are screened for problems that may be related to their medication. You may remember receiving a letter informing you that the study was going on.

X has been identified by the study screening procedure. This does not mean that X necessarily has a medication problem, but simply that it would be worth re-evaluating him/her. I'd like to discuss the case with you to see if you think it is worth pursuing further.

3. Describe the identified potential problem.

The screening showed X has symptoms of confusion and/or has had a fall in the past 3 months (as appropriate) and is taking (drug name), a benzodiazepine that studies have shown can cause psychomotor problems.

4. Proceed with the remainder of the discussion according to the guideline and the category to which the patient belongs.

Problem: Cyclic and other antidepressant use with one of the

following symptoms:

- 1) *confusion,*
- 2) *fall(s) during last three months*
- 3) *dizziness and orthostasis (≥ 20 mmHg drop in systolic blood pressure on standing)*

Goal: *If an antidepressant is required, reduce the dose to a minimum needed to control depression or switch to an alternative which does not cause confusion, falling or orthostasis. Otherwise, discontinue the drug if possible.*

Solution:

1. Collect clinical details

- ✓ What are the patient's symptoms (dizziness, falls)?
- ✓ If orthostatic, what are the patient's sitting/lying and standing blood pressures?
- ✓ If confused, what is the nature of the patient's confusion? (e.g. difficulty in focusing attention, disorganized thinking, disturbance of consciousness; do any of these seem to fluctuate?)
- ✓ Does the patient take any other drugs with psychomotor or blood pressure effects?

2. Inform the physician

- a. Clarify the indication for the drug.
- b. Inform the physician of any potentially interacting drugs.
- c. Ask if physician would like to reevaluate the patient.
- d. Ask if physician would like you to try a gradual taper (as part of a dose reduction, discontinuation of the drug or prior to change to an alternative, e.g. SSRI)
- e. If a taper is to be attempted, ask if physician would like routine evaluation of patient at the end of the taper or would like visit scheduled based on symptom emergence.

3. Ask for follow-up instructions

4. Discuss with patient/caregiver

- a. Hazards of cyclic and other antidepressants
- b. Alternatives
- c. If the patient has a history of falls, discuss fall safety
- d. If the patient has orthostatic hypotension, discuss fall safety and countermeasures (see below)
- e. If agreed to by physician, ask if patient/caregiver is willing to consider a taper.

5. If evidence of problems, schedule a visit with physician

Background Information

Facts:

1. Side effects of cyclic antidepressants are frequent in elderly persons. They are due to drug actions on the central and peripheral autonomic nervous systems and include:
 - Orthostatic hypotension (≥ 20 mmHg drop in systolic blood pressure on standing)
 - Sedation
 - Anticholinergic reactions (dry mouth, constipation, urinary retention, narrow angle glaucoma, increased anxiety and agitation, confusion)
 - Cardiac toxicity (tachycardia, abnormal cardiac rhythms)
2. Side effects of SSRIs are frequent in elderly persons. They include:
 - GI complaints (nausea)
 - Nervousness and insomnia
 - Sexual dysfunction
3. Elderly persons are more likely to experience toxic effects of antidepressants due to age-related changes in drug absorption, binding, distribution, metabolism, and excretion which may elevate blood levels. In addition, they may be more sensitive to the effects of antidepressants at therapeutic levels. As a result, the majority of elderly persons need lower doses than do younger adults.
4. Elderly persons using cyclic and other antidepressants including SSRIs may have almost two times the risk of hip fracture and falls when compared to elderly nonusers. Minimizing the use of the CNS-active medications may decrease the risk of future falls.
5. Cyclic and other antidepressants including SSRIs interact with a number of other drugs to produce adverse effects.

Guidelines for Use:

- Initial therapy should begin with very low doses. Dose increases should be made in small increments with close patient monitoring for changes in blood pressure, pulse or sedation.
- Antidepressants classified as secondary amines generally cause fewer side effects in elderly persons than do those classified as tertiary amines and are therefore preferred.

Secondary amines		Tertiary amines	
Generic name	Trade name	Generic name	Trade name
desipramine	Norpramin, Pertofrane	amitriptyline	Elavil, Endep
nortriptyline	Aventyl, Pamelor	Imipramine	Tofranil
protriptyline	Vivactil	Doxepin	Adapin, Sinequan
amoxapine	Asendin	Trimipramine	Surmontil
maprotiline	Ludiomil	Others: SARIs* Trazodone	Desyrel

*Serotonin Antagonist and Reuptake Inhibitors

- Cyclic and other antidepressants should be used with caution in elderly persons with preexisting cardiac conduction defects. Such patients should have ECG monitoring during treatment.
- Be aware of potential interactions with other drugs which may increase risk of sedation, confusion, falls or postural blood pressure changes.

Drugs Which Interact with Cyclic Antidepressants	Result of Interaction
Antihypertensives	hypotension, especially orthostatic
calcium channel blockers, cimetidine, estrogen, quinidine, SSRIs	intensified CNS and peripheral antidepressant side effects
all CNS depressants - sedatives - narcotic analgesics - alcohol	excessive CNS depression
other drugs with anticholinergic (atropine-like) effects: e.g. <u>some antispasmodics</u> - hyoscyamine sulphate (Anaspaz, Levsin) <u>some anti-Parkinson drugs</u> - procyclidine HCl (Kemedrin) - trihexyphenidyl HCl (Artane)	CNS depression, confusion and delirium Peripheral anticholinergic effects - dry mouth, constipation, urinary retention, narrow angle glaucoma
MAOIs	serotonin syndrome

- Serotonin reuptake inhibitors (SSRIs) may be preferable in some patients.
e.g.: fluoxetine (Prozac), starting dose 10mg in the morning
paroxetine (Paxil), starting dose 10mg in the morning
sertraline (Zoloft), starting dose 25mg daily.
citalopram (Celexa), starting dose 10mg daily.
escitalopram (Lexapro), starting dose 10mg daily.

NOTE: Older depressed patients on SSRIs may be still at risk for falls. (1)

Guidelines for Withdrawal:

- Abrupt withdrawal of an antidepressant may cause symptoms of anxiety, insomnia and a recurrence of symptoms for which it was prescribed.
- If the patient has been taking the drug regularly for 8 weeks or more, a trial of gradual dose reduction should be tried.
- Withdrawal should be spread over about 4 weeks, e.g. reduce the dose by a quarter each week. The patient should be monitored closely.

References:

1. Ensrud KE, Blackwell TL, Mangione CM, et al. Central Nervous System-Active medications and risk for falls in older women. *Journal of the American Geriatrics Society*. 2002;50(10):1629-37
2. Salzman C. *Clinical Geriatric Psychopharmacology*. Baltimore, Williams & Wilkins, 1992.
3. Shafner M. *The Nurse, Pharmacology, and Drug Therapy*. Addison-Wesley Nursing, 1993.
4. Ray WA, Griffin MR, Malcolm E. Cyclic antidepressants and the risk of hip fracture. *Arch Intern Med* 1991; **151**: 754-756.
5. Tideiksaar R. Preventing falls. *Geriatrics* 1986; **41**: 26-28.

Problem: Cyclic antidepressants

Solution Step 2 - Informing the Physician

Patients identified by the study screening procedures have a potential medication problem. However, we do not know everything about the patient and their medical history, and there may be good clinical reasons for the physician to have prescribed for the patient as s/he did. The physician may be aware of the potential problem, but have chosen that treatment as the best compromise for that particular patient. He/she may be alarmed that the patient has been identified as having a problem, feel defensive because his treatment is being called into question and be worried about patient complaints and litigation. Tact and diplomacy are therefore extremely important.

Before calling the physician, rehearse what you are going to say with the study pharmacist.

Suggested approach:

1. Introduce yourself and tell the physician the name of the patient you are calling about.
2. Explain why you are calling.

I'm calling you about your patient X (patient's name). We are taking part in a study in which home-health patients are screened for problems that may be related to their medication. You may remember receiving a letter informing you that the study was going on.

X has been identified by the study screening procedure. This does not mean that X necessarily has a medication problem, but simply that it would be worth re-evaluating him/her. I'd like to discuss the case with you to see if you think it is worth pursuing further.

3. Describe the identified potential problem.

If confused or history of fall(s) - *The screening showed X has symptoms of confusion and/or has had a fall in the past 3 months (as appropriate) and is taking (drug name), a cyclic or other antidepressant that studies have shown can cause psychomotor problems.*

If patient has symptoms and signs of orthostasis - *The study screening identified X as having orthostasis. X reports becoming dizzy on standing and had a 20 mm Hg drop in systolic on standing. X is taking (drug name), a cyclic antidepressant which can produce marked orthostasis.*

4. Proceed with the remainder of the discussion according to the guideline and the category to which the patient belongs.

Please refer to the following guidelines under the psychotropic protocol for Benzodiazepines:

- **Guidelines for Sleep Hygiene**
- **Advice for Patients with Orthostatic Hypotension**
- **Guidelines to Prevent Falls in the Home**

Problem: Antipsychotic use with one of the following symptoms:

- 1) *confusion,*
- 2) *fall(s) during last three months*
- 3) *dizziness and orthostasis (≥ 20 mmHg drop in systolic blood pressure on standing)*

Goal: *Reduce the dose to a minimum needed to control psychotic symptoms/behavior.*

Solution:

1. Collect clinical details

- ✓ If the antipsychotic is being taken PRN, what is the pattern of use?
- ✓ What are the patient's symptoms (dizziness, falls)?
- ✓ If orthostatic, what are the patient's sitting/lying and standing blood pressures?
- ✓ If confused, what is the nature of the patient's confusion? (e.g. difficulty in focusing attention, disorganized thinking, disturbance of consciousness; do any of these seem to fluctuate?)
- ✓ Does the patient take any other drugs with psychomotor or blood pressure effects?

2. Inform the physician

- a. Clarify the indication for the drug.
- b. Inform the physician of any potentially interacting drugs.
- c. Ask if physician would like to reevaluate the patient.
- d. Ask if physician would like you to try a gradual taper.
- e. If a taper is to be attempted, ask if physician would like routine evaluation of patient at the end of the taper or would like visit scheduled based on symptom emergence.

3. Ask for follow-up instructions

4. Discuss with patient/caregiver

- a. Hazards of antipsychotics
- b. Alternatives, if thought appropriate after discussion with the doctor
- c. If the patient has a history of falls, discuss fall safety
- d. If the patient has orthostatic hypotension, discuss fall safety and countermeasures (see below)
- e. If agreed to by physician, ask if patient/caregiver is willing to consider a taper.

5. If evidence of problems, schedule a visit with physician

Background Information

Facts:

1. Side effects of antipsychotics are frequent in elderly persons. They involve the autonomic and central nervous systems and include:
 - Sedation
 - Orthostatic hypotension (≥ 20 mmHg drop in systolic blood pressure on standing)
 - Anticholinergic reactions (dry mouth, constipation, urinary retention, narrow angle glaucoma, increased anxiety and agitation, confusion)
 - Akathisia (motor restlessness especially in the legs, extreme desire to move)
 - Parkinsonism (slowness of movement, rigidity and tremor)
 - Tardive dyskinesia (tremors of the tongue, tongue thrusting, lip smacking, twisting movements, frequent blinking)
 - Dystonia (neck contractions-relaxations, upper torso and pelvic thrusting)

2. Elderly persons are more likely to experience toxic effects of antipsychotics due to age-related changes in drug absorption, binding, distribution, metabolism, and excretion which may elevate blood levels. In addition, they may be more sensitive to the effects of antipsychotics at therapeutic levels. As a result, the majority of elderly persons need lower doses than do younger adults.

3. Elderly persons using antipsychotics have two times the risk of falls and hip fracture when compared to elderly nonusers.

Guidelines for Use:

- Antipsychotics are recommended in elderly persons for the management of symptoms of (1) psychosis and (2) severe late-life behavior disorders related to dementia.

Antipsychotic Drugs			
Generic Name	Trade Name	Generic Name	Trade Name
aripiprazole	Abilify	perphenazine*	Trilafon
chlorpromazine	Thorazine	pimozide	Orap
clozapine	Clozaril	quetiapine	Seroquel
fluphenazine	Prolixin	risperidone	Risperdal
haloperidol	Haldol	thioridazine	Mellaril
loxapine	Loxitane	thiothixene	Navane
mesoridazine	Serentil	trifluoperazine	Stelazine
molindone	Moban	ziprasidone	Geodon
olanzapine	Zyprexa	*with amitriptyline	Ertafon, Triavil

- The lowest dose needed to control symptoms should be used.
- All patients on long term antipsychotic therapy should undergo periodic trials of gradual withdrawal to determine if the drug can be discontinued or the dose reduced. Be aware of potential interactions with other drugs which may increase risk of sedation, confusion, falls or postural blood pressure changes, such as antihypertensive medications, antidepressants, sedatives, narcotic analgesics and alcohol.
- For patients who are on antipsychotics because of behavioral symptoms related to dementia and who do not have a history of extreme violence or recent pronounced violence, these steps for withdrawal are recommended:

Model taper of antipsychotics used to control behavioral symptoms	
1.	Decrease dose by 50%.
2.	Ask caregiver or family member to monitor the patient's behavior for 7 days.
3.	If the behavior does not worsen, decrease dose by 50% at the end of 7 days.
4.	Ask caregiver or family member to monitor the patient's behavior for 7 days.
5.	Repeat steps #3 and #4 until dose is reduced to lowest effective and/or d/c. Assist caregivers in the development of care plans to manage the patient's specific behavioral symptoms. If at any point during the withdrawal period, symptoms begin to appear or worsen, then the reduction should be stopped. If necessary, the dose would be increased to that just before the problem occurred. In this way the maintenance dose would be at the lowest level needed to control symptoms.

- For patients who have a chronic psychotic illness like schizophrenia, withdrawal of an antipsychotic drug should only be attempted in conjunction with a full mental health evaluation. If the decision is made to try to withdraw the drug, it should be done very slowly, by 1/4 to 1/3 every 30 days until the lowest dose that manages symptoms is found.

Example:

Original dose	= 100 mg bid
First reduction	= 75 mg bid, for 30 days
Second reduction	= 50 mg bid, for 30 days
Third reduction	= 25 mg bid, for 30 days
Final reduction	= 0

References:

1. Salzman C. *Clinical Geriatric Psychopharmacology*. 2nd ed. Baltimore: Williams & Wilkins, 1992.
2. Shafner M. *The Nurse, Pharmacology, and Drug Therapy*. 2nd ed. California: Addison-Wesley Nursing, 1993.
3. Ray WA, Griffin MR, Malcolm E. Cyclic antidepressants and the risk of hip fracture. *Arch Intern Med* 1991; **151**: 754-756.
4. Tideiksaar R. Preventing falls: Home hazard checklists to help older patients protect themselves. *Geriatrics* 1986; **41**: 26-28.
5. Taylor JA, Ray WA, Meador KG. *Managing Behavioral Symptoms in Nursing Home Residents: A Manual for Nursing Home Staff*. 3rd ed. Nashville: Vanderbilt University School of Medicine, 1995.

Problem: Antipsychotics

Solution Step 2 - Informing the Physician

Patients identified by the study screening procedures have a potential medication problem. However, we do not know everything about the patient and their medical history, and there may be good clinical reasons for the physician to have prescribed for the patient as s/he did. The physician may be aware of the potential problem, but have chosen that treatment as the best compromise for that particular patient. He/she may be alarmed that the patient has been identified as having a problem, feel defensive because his treatment is being called into question and be worried about patient complaints and litigation. Tact and diplomacy are therefore extremely important.

Before calling the physician, rehearse what you are going to say with the study pharmacist.

Suggested approach:

1. Introduce yourself and tell the physician the name of the patient you are calling about.
2. Explain why you are calling.

I'm calling you about your patient X (patient's name). We are taking part in a study in which home-health patients are screened for problems that may be related to their medication. You may remember receiving a letter informing you that the study was going on.

X has been identified by the study screening procedure. This does not mean that X necessarily has a medication problem, but simply that it would be worth re-evaluating him/her. I'd like to discuss the case with you to see if you think it is worth pursuing further.

3. Describe the identified potential problem.

If confused or history of fall(s) - *The screening showed X has symptoms of confusion and/or has had a fall in the past 3 months (as appropriate) and is taking (drug name), an antipsychotic that studies have shown can cause psychomotor problems.*

If patient has symptoms and signs of orthostasis - *The study screening identified X as having orthostasis. X reports becoming dizzy on standing and had a 20 mm Hg drop in systolic on standing. X is taking (drug name), an antipsychotic that studies have shown can produce marked orthostasis.*

4. Proceed with the remainder of the discussion according to the guideline and the category to which the patient belongs.

Basic Skills for the Management of Behavioral Symptoms Related to Dementia

COMMUNICATION SKILLS

Approach (feelings and attitudes)

1. Be positive
2. Stay neutral. Don't take the patient's behavior personally.
3. Remain calm.

Verbal Message (what you say)

1. Identify yourself.
2. Talk slowly.
3. Use simple words.
4. Use one-step commands.
5. Put sentences in positive terms. Don't use the word, "No!"
6. Speak to the patient's feelings. Validate what he/she feels rather than what is said.

Nonverbal message (body language)

1. Make eye contact.
2. Get at a level equal to the patient.
3. Match your actions to your words.
4. Move slowly.

CAREGIVING METHODS

Match demands of care to the patient's abilities. Watch for signs of increasing anxiety to tell you when you need to slow down, re-explain, reassure, or stop and begin again later.

1. Provide a routine each day.
2. Schedule periods of physical activity.
3. Provide times for rest.
4. Provide a gradual orientation to new routines and places.
5. Use the same caregiver to provide care.
6. Break down complex tasks into single steps.
7. Show how to begin an action.
8. Simplify clothing fasteners.
9. Give as much control to the patient as possible.
10. Give rewards.
11. Use distraction.
12. Instead of using force, leave and return later.
13. Anticipate needs during care.
14. Make sure the patient uses hearing or vision aides when needed.

ENVIRONMENTAL MANAGEMENT

1. Label rooms or items when necessary to help confused patients better locate themselves. Simple black and white line pictures may be helpful if patient has lost the ability to recognize words.
2. Reduce distractions of unattended TVS or other background noise. If the patient is sensitive to noise, don't place him/her in large groups of people which may increase anxiety and confusion.
3. Provide opportunities for touch through hugging, kissing, patting, or holding hands. Offer touch through animals, gardening, or objects with different textures and shapes.

Please refer to the following guidelines under the psychotropic protocol for Benzodiazepines:

- **Guidelines for Sleep Hygiene**
- **Advice for Patients with Orthostatic Hypotension**
- **Guidelines to Prevent Falls in the Home**