

Polypharmacy and Drug Interactions

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- ❖ **Venlafaxine, trazodone, and bupropion do not significantly affect P450 function**
- ❖ **Citalopram**
 - ❖ **1A2, 2C19, 2D6 -- weak inhibition**
 - ❖ **2C9, 3A4 -- no inhibition**

Antidepressants and Falls in Nursing Homes

(Thapa et al, *NEJM* 1998;339:875-82)

- ❖ **2428 NH residents: 665 on TCAs, 612 on SSRI, 304 on trazodone, 847 nonusers**
- ❖ **New users of each type of antidepressant had higher adjusted fall rates than nonusers**
- ❖ **Fall rates were dose-related**
- ❖ **Little difference in fall rates between TCAs and SSRIs**

Cautions in Interpreting Antidepressant Blood Levels

- ❖ **Many laboratories are unreliable at low concentrations**
- ❖ **Plasma level responses may differ in dementia**
- ❖ **Active metabolites may accumulate (renal disease, individual variation)**

Antidepressant Choices: Tricyclic Antidepressants (TCAs)

- ❖ **Advantages**: proven efficacy, availability of blood levels for selected agents, low cost
- ❖ **Disadvantages**: sedation, cardiovascular effects, autonomic side effects (hypotension), toxicity.
- ❖ **Examples**: nortriptyline, 10 to 150 mg daily; desipramine, 10 to 150 mg daily

Antidepressant Choices: Selective Serotonin Reuptake Inhibitors (SSRIs)

- ❖ **Advantages:** Effective with minimal toxicity, avoidance of autonomic side effects, less sedation, ease of administration
- ❖ **Disadvantages:** Overstimulation/insomnia, G.I. symptoms, hyponatremia, drug interactions and high cost
- ❖ **Examples:** fluoxetine, 10 to 80 mg/day, sertraline, 25 to 200 m/day, paroxetine, 10 to 50 mg/day, citalopram 20 mg/day

Antidepressant Choices: **Monoamine Oxidase (MAO)** **Inhibitors**

- ❖ **Advantages:** MAO levels increase with age, low cardiac effects, effectiveness for atypical depression.
- ❖ **Disadvantages:** Dietary restriction, potential hypertensive crisis, orthostatic hypotension, drug interactions.
- ❖ **Examples:** phenelzine, 15 mg bid to tid, tranylcypromine, 10 mg bid to tid

Antidepressant Choices: Other

Drugs

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- ❖ **Trazodone** (start: 25 to 50 mg/day) may require multiple daily dosing and cause sedation, orthostatic hypotension, memory loss, arrhythmia, or priapism.
- ❖ **Nefazodone** (start: 50 mg/day) has antidepressant and antianxiety effects; may cause sedation; no sexual side effects.

Antidepressant Choices: Other

Drugs

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- ❖ Venlafaxine (start: 12.5 mg/day) may increase blood pressure and require multiple daily dosing.
- ❖ Mirtazepine (start: 15 mg/day) may cause sedation; few side effects.
- ❖ Bupropion (start: 37.5 mg BID) lowers seizure threshold and may cause agitation.

Antipsychotics for Agitated or Psychotic Geriatric Depression

- ✓ **Efficacy similar among different agents**
- ✓ **Modest effects for agitation**
- ✓ **Low doses usually effective**
- ✓ **Use side effect profiles as guidelines**

Examples of Antipsychotic Drugs for Geriatric Patients

- ❖ Haloperidol: high potency
 - ❖ start: 0.5 - 1 mg/day
 - ❖ parkinsonian side effects
- ❖ Thioridazine: low potency
 - ❖ start: 10 - 25 mg/day
 - ❖ anticholinergic, postural hypotensive side effects