

Student Version:
ANTIDEPRESSANTS

Sandra C. Pendergraft
Valencia Community College
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ANTIDEPRESSANTS

- AKA “mood elevators”
- Depression is frequently described as a chemical imbalance
- Indications for use
 - **Depression**
 - Panic disorders
 - Smoking cessation

ANTIDEPRESSANTS (cont)

- **CLASSIFICATIONS** by chemical groups
 - Tricyclics (TCAs)
 - Monoamine Oxidase Inhibitors (MAOIs)
 - **Selective Serotonin Re-uptake Inhibitors (SSRIs)**
 - Miscellaneous

ANTIDEPRESSANTS (cont)

- **Tricyclics**
 - Examples
 - Elavil® (amitriptyline)
 - Tofranil® (imipramine)
 - First generation antidepressants
 - **Not** used as first line treatment
 - **Increases nor-epinephrine and serotonin activity**
 - Strong anticholinergic activity accounts for many of the side effects

ANTIDEPRESSANTS (cont)

- **Tricyclics (cont)**
 - Delayed action . . . 2-4 weeks
 - Elevate mood
 - Increase alertness
 - Frequently given at bedtime due to mild sedative effect
 - Should **NOT** be used for the elderly
 - High incidence of sedation
 - Hypotension
 - Arrhythmias

ANTIDEPRESSANTS (cont)

- **Tricyclics (cont)**
 - **Side Effects**
 - Dry mouth
 - Increased appetite and weight gain
 - Drowsiness and dizziness
 - Blurred vision
 - Constipation and urinary retention
 - Postural hypotension
 - Cardiac arrhythmias and palpitations
 - Confusion (especially in the elderly)

ANTIDEPRESSANTS (cont)

• Tricyclics (cont)

– Contraindications

- Cardiac, renal, GI and liver disorders
- Older adults
- Glaucoma
- Obesity
- Seizure disorders
- Concomitant use of MAOIs

ANTIDEPRESSANTS (cont)

• Tricyclics (cont)

– Interactions

- Clonidine - hypertensive crisis
- SSRIs (Selective Serotonin Re-uptake Inhibitors) – increased tricyclic serum levels
- CNS drugs
- Alcohol

ANTIDEPRESSANTS (cont)

• Monoamine Oxidase Inhibitors

– Examples

- Nardil® (phenelzine)
- Eldepryl® (selegiline)
- Parnate® (tranylcypromine)

– Inhibit MAO which metabolizes norepinephrine and serotonin

– MAO is also responsible for metabolism of tyramines. If tyramines are not metabolized then blood vessels constrict . . .

- Hypertension (hypertensive crisis can be fatal)
- Chest pain
- Intracranial bleed

ANTIDEPRESSANTS (cont)

• Monoamine Oxidase Inhibitors (cont)

– Rarely used because of

- Potentially serious, or fatal, side effects
- Food and drug interactions

– See pages 355-6, Woodrow text for:

- Side effects
- Contraindications
- Interactions
- Foods rich in tyramine

ANTIDEPRESSANTS (cont)

• Selective Serotonin Re-uptake Inhibitors (SSRIs)

– Examples

- Prozac® (fluoxetine)
- Zoloft® (sertraline)
- Pristig® (desvenlafaxine)
- Viibryd® (vilazodone hydrochloride)
 - Approved by FDA in January, 2011
 - <http://www.centerwatch.com/drug-information/fda-approvals/drug-details.aspx?DrugID=1131>

ANTIDEPRESSANTS (cont)

• Selective Serotonin Re-uptake Inhibitors

– First line treatment

– Selectively block the reabsorption of the neurotransmitter serotonin (helps restore the brain's chemical balance).

– Side effects

- Nausea, anorexia
- Insomnia, anxiety, nervousness, tremors, drowsiness, fatigue, dizziness, H/A
- Diarrhea, sweating
- Sexual dysfunction

ANTIDEPRESSANTS (cont)

- **Selective Serotonin Re-uptake Inhibitors (cont.)**
 - **Contraindications / Use with caution**
 - Suicide prone
 - Bipolar disorders (may cause manic attacks)
 - Liver or renal impairment
 - Diabetes
 - Eating disorders
 - Pregnancy; lactation

ANTIDEPRESSANTS (cont)

- **Selective Serotonin Re-uptake Inhibitors (cont.)**
 - **Interactions**
 - Other CNS drugs
 - May need to lower dosage of tricyclics
 - » Monitor for toxicity
 - Do not take concomitantly with MAOIs
 - Antiarrhythmics
 - Anticoagulants
 - Beta-blockers
 - Calcium channel blockers

ANTIDEPRESSANTS (cont)

- **Miscellaneous**
 - Examples
 - Wellbutrin® (bupropion)
 - Remeron® (mirtazapine)

ANTIDEPRESSANTS (cont)

- **Miscellaneous (cont)**
 - **Wellbutrin®**
 - **Useful in severe depression** with extreme fatigue, lethargy and psychomotor retardation
 - Inhibits dopamine, norepinephrine, serotonin
 - Do not use concurrently with MAOIs
 - Watch for anxiety
 - See pages 357-8 of Woodrow text for side effects, cautions and interactions.

ANTIDEPRESSANTS (cont)

- **Miscellaneous (cont) - Wellbutrin® (cont.)**
 - Are there unlabeled uses of this drug?
 - AHHD
 - Enhancement of weight loss
 - Aggressive behavior
 - Neuropathic pain
 - Alcohol withdrawal
 - Fibromyalgia
 - Stress incontinence