

Antianxiety Treatments Antidepressant Treatments

Presented by Francine Knowles



Lecture Objectives

At the completion of this lecture the student will:

- Identify psychobiological interventions for the treatment of anxiety and depression
- Describe anxiolytic drugs

Lecture objectives cont.

- ◆ Define nursing responsibilities in administering anxiolytic drugs
- ◆ Describe the classifications of antidepressant medications
- ◆ Define nursing responsibilities in administering the various classifications of antidepressant medications

Lecture objectives cont.

- ◆ Describe the nursing care of a patient receiving electroconvulsive therapy (ECT)

Antianxiety Drug Therapy

- Mechanism of Action Benzodiazepines (BZDs)
 - ◆ Increases neurotransmitter GABA
 - ◆ Preference for limbic system
 - ◆ Depresses CNS
 - ◆ Produces skeletal muscle relaxation
 - ◆ Anticonvulsant properties

Benzodiazepine Action cont.

- Rapidly absorbed from GI tract
- Crosses blood-brain barrier
- Crosses placenta and enters breast milk
- Metabolized by liver
- Metabolites active as CNS depressant

Indications for Use Benzodiazepines

- Short term treatment of anxiety
- Seizure disorders
- Acute stage of panic

Benzodiazepines (BZDs)

- Alprazolam Xanax
- Clonazepam Klonopin
- Diazepam Valium
- Lorazepam Ativan
- Oxazepam Serax

Side Effects

- Central Nervous System Depressant
- Cardiovascular Side Effects
- Blood
- Gastrointestinal
- Other

Side Effects cont.

- Dependence
- Tolerance
- Physical addiction
- Psychological addiction
- Withdrawal syndrome

Side Effects cont.

- Xanax, Valium and Ativan should only be used short-term. Dependence and tolerance develop quickly
- Signs and symptoms of withdrawal
 - ◆ Anxiety, tremors, insomnia
 - ◆ Grand mal seizures, delirium
 - ◆ Respiratory depression and death

Patient Teaching Benzodiazepines

- Take as directed
- Avoid alcohol
- Avoid caffeine
- Contraindicated in pregnancy
- Contraindicated in lactation
- Caution against driving and machinery

Patient Teaching cont.

- Do not stop drug abruptly
- Report sleep pattern changes
- Paradoxical excitation
- Menstrual irregularities

Buspirone HCL BuSpar

- Nonbenzodiazepine—BuSpar
- Non addicting
- Less sedating
- No physical or psychological dependence
- Can be used for long periods of time
- Useful in generalized anxiety disorder (GAD)

BuSpar Patient Teaching

- At least 2-3 weeks to take effect
- Take drug as prescribed
- Cannot be used as a prn for anxiety
- Does not produce an immediate calming effect

Non Drug Anxiety Treatments

- Cognitive Restructuring
 - ◆ Beck's Triad
 - ◆ Negative self-depreciating view of self
 - ◆ Pessimistic view of the world
 - ◆ Belief that negative events will continue into the future

Cognitive Restructuring cont.

- Cognitive Therapy
 - ◆ Identifying and testing negative thinking
 - ◆ Develop new positive thinking
 - ◆ Rehearsal of new thinking responses

Cognitive Restructuring cont.

- Useful in treatment of generalized anxiety disorder
- Useful in treatment of depression
- Often employed adjunctively with meds

Relaxation Training

- Progressive muscle relaxation
- Visualization
- Meditation

Relaxation Training cont.

- Muscle groups cannot be tense and relaxed at same time
- Physiological effects opposite of those produced by anxiety

Physical Exercise

- Promotes metabolism of adrenaline
- Stimulates production of endorphins

Systematic Desensitization

- Phobias
- Panic disorder
- Social phobias
 - ◆ Paxil
 - ◆ Propranolol to lesser extent

Flooding (Implosion Therapy)

- Goal—extinguish anxiety as a conditioned response
- Individual exposed to large amount of stimulus he/she finds undesirable
- Carries great risk—must be done by trained therapist

Thought Stopping

- Used to treat OCD
- Not found to be greatly beneficial

Response Prevention

- Used in treatment of OCD
- Trained therapist prevent patient from performing ritual (compulsion) associated with thought (obsession)
- Client learns anxiety can be managed without carrying out compulsion
- Carries risk

Posttraumatic Stress Disorder

- SSRI's
- Anxiolytics (BZDs) for short term
- Needs to relive experience in safe controlled environment
- EMDR
- Assess for substance abuse

Somatoform Disorders

- Avoid antianxiety drugs except BuSpar
- Assess unmet needs
- Assess secondary gain
- No insight into relationship between symptoms and conflict
- Assess meds, substance abuse and history

Antidepressant Medications

- TCAs
- MAOIs
- SSRIs
- SNRIs
- SDRIs
- SARIs
- NaSSA

Tricyclic Antidepressants

- Mechanism of action
 - ◆ Block reuptake of norepinephrine and to lesser degree serotonin
 - ◆ Block the muscarinic receptors that bind acetylcholine which leads to typical anticholinergic side effects

Common TCA's

- | | |
|-----------------|-----------|
| ■ Amitriptyline | Elavil |
| ■ Desipramine | Norpramin |
| ■ Doxepin | Sinequan |
| ■ Imipramine | Tofranil |
| ■ Nortriptyline | Aventyl |

Side Effects

- Anticholinergic effects
- CNS effects
- Endocrine and sexual side effects
 - ◆ Decreased libido
 - ◆ Weight gain-appetite stimulation-carbohydrate craving
 - ◆ Breast enlargement in both sexes (gynecomastia)

Serious Side Effects

- Cardiovascular
 - ◆ Hypotension
 - ◆ Arrhythmias-tachycardia
 - ◆ ECG changes
 - ◆ Heart failure

Serious Side Effects cont.

- Baseline ECG should be done before starting treatment
- Contraindicated in cardiac disease
- Use cautiously with elderly
- Monitor vital signs regularly

Patient Teaching TCAs

- Takes 10-14 days for any effects
- Takes 4-8 weeks for full effects
- Avoid alcohol, driving and heavy machinery
- Take at bedtime to avoid daytime sedation
- Do not stop taking abruptly
- Monitor anticholinergic effects

Monoamine Oxidase Inhibitors

- Mechanism of action
 - ◆ Interfere with this enzyme to destroy the monoamines norepinephrine, dopamine and serotonin
 - ◆ MAO present in liver cells to destroy the monoamine tyramine

MAOIs Action cont.

- ◆ Tyramine present in many foods
- ◆ MAOIs inhibit MAO in the liver and can result in fatal interactions between these drugs and tyramine rich foods
- ◆ Tyramine triggers release of norepinephrine which is a powerful vasoconstrictor which can lead to hypertensive crisis

Indications for Use MAOIs

- Responds best to atypical depression
 - ◆ Overeating
 - ◆ Phobic anxiety
 - ◆ Panic attacks
 - ◆ Hypochondrias
 - ◆ Chronic pain

Common Side Effects MAOIs

- Weight gain
- Orthostatic hypotension
- Cardiac changes
- Other effects similar to TCAs

Serious Side Effects

- Hypertension
- Interaction with tyramine substances or with drugs containing epinephrine or psuedoephedrine can cause a life threatening hypertensive crisis

Tyramine Rich Foods

- Hard Cheeses
- Organ meats
- Beer and red wine
- Any foods containing pressor agents
- Page 576 text Box 20-5 and Box 20-6

MAOIs Cont.

- MAOI patch
 - ◆ Bypasses alimentary tract
 - ◆ No food-drug interaction

Selective Serotonin Reuptake Inhibitors (SSRIs)

- Mechanism of Action
 - ◆ Selectively block reuptake of serotonin
 - ◆ Do not block muscarinic receptors so they have little autonomic effects
 - ◆ Safer than TCAs and MAOIs
 - ◆ No cardiac toxicity
 - ◆ Less sedation

Indications For Use

- First line drug for all depression except severe inpatient depression
- Safer for patients with SI (suicide ideation)
- Useful in treatment of anxious depression
- Useful in many anxiety disorders

Common SSRIs

- Fluoxetine Prozac
- Paroxetine Paxil
- Sertraline Zoloft
- Fluvoxamine Luvox

Common Side Effects

- GI—nausea, diarrhea, weight loss
- Sexual dysfunction
- Headache
- Insomnia, nightmares
- Agitation, anxiety, tremor
- Sweating

Serious Side Effects SSRI's

- Central Serotonin Syndrome (CSS)
 - ◆ Caused by overaction of serotonin
 - ◆ Co-administration of MAOI
 - ◆ Need 5 week washout period before switching to MAOI
 - ◆ 2 weeks if switching from MAOI to SSRI
 - ◆ Addition of a 2nd SSRI

Central Serotonin Syndrome

- Abdominal pain, diarrhea, sweating
- Fever
- Altered LOC
- Increased motor activity
- Cardiovascular shock
- Death

CSS Treatment

- Block serotonin with propranolol, methysergide, cyproheptadine
- Treat hyperthermia
- Anticonvulsants
- Muscle rigidity—dantrolene, diazepam
- Paralysis—pancuronium, succinylcholine

Atypical Antidepressants

SDRI

Bupropion (Wellbutrin, Zyban)

SNRI

Venlafaxine (Effexor)

NaSSA

Mirtazapine (Remeron)

Antidepressants cont.

SARI (Serotonin-2 Antagonist/Reuptake Inhibitor)

◆ Trazadone (Desyrel)

◆ Nefazodone (Serzone)

Trazadone Desyrel

- Very sedating
- Useful in treating depression with sleep disturbance
- Administer at bedtime
- Priapism— rare but serious side effect
- Extreme dizziness and fainting

Bupropion (Wellbutrin)

- Increased risk of seizures
- Seizures can occur in people with no known seizure disorder
- Contraindicated in individuals with anorexia and bulimia
- Can be used to treat ADHD, smoking addiction and chronic fatigue syndrome.

Electroconvulsive Therapy ECT

- Indications:
 - ◆ Life threatening depression
 - ◆ Treatment refractory depression
- Informed consent
- Preoperative assessment
- NPO for at least 4 hours before treatment

Assessment ECT

- History of:
 - ◆ Head injury, back injury or intercranial lesion
 - ◆ Cardiac history
 - ◆ History of serious illness
- Vital signs and other pre-op assessment

Patient Teaching ECT

- Confusion, disorientation, short-term memory loss
- 2-3 times a week for 6-12 treatments
- Not a definite cure
- Memory usually returns
 - ◆ May take up to 6 months

Obsessive Compulsive Disorder

- Clomipramine (Anafranil)
