Mental health pharmacology

Disclaimer: These notes are designed to provide the key points of each topic and may not contain all necessary information. Every effort is made to ensure this content is up to date and accurate at the time of writing. No liability is assumed for the content or its relation to current standards and practices. This should not replace comprehensive nursing educational resources.

Pharmacotherapy notes:

- Dysphoria is the medical term for depression
- These medications should always be tapered
- Patients should be educated on realistic expectations and that all mental health medications take several weeks or longer to take effect
- Medications should be used in combination with psychotherapy
- Highest priority assessment is risk of suicide
- A complementary and alternative medication (CAM) used for mental health is St. John's Wart
 - o Note: This can increase serotonin levels leading to serotonin syndrome
- Medications that affect serotonin carry a risk of causing serotonin syndrome
 - Risk increases with use of multiple similar medications
 - Symptoms include tremors, fever, AMS
- Assess for depression / anxiety using the PHQ9, GAD7 or other standardized tool

Drug class: Selective serotonin reuptake inhibitors (SSRI)

- Drugs:
 - Sertraline (Zoloft)
 - Fluoxetine (Prozac)
 - Escitalopram (Lexapro)
 - Citalopram (Celexa)
 - Paroxetine (Paxil)
- MOA: Inhibit reuptake of serotonin, thereby increasing serotonin effects
- Indications: Depression, anxiety
- Off label use: For premature ejaculation
- SE/AE: Insomnia and sexual dysfunction
- Black Box warning: Risk for suicide
- First line for depression and anxiety
- Considered relatively safe in pregnancy

Drug class: Serotonin / Norepinephrine reuptake inhibitors (SNRI)

- Drugs:
 - Dulaxotine (Cymbalta)
 - Venlafaxine (Effexor)
- MOA: Inhibit reuptake of serotonin and norepinephrine, thereby increasing the effects of these
- Indications: Anxiety, depression, migraine prevention, fibromyalgia
- SE/AE: Sexual dysfunction, insomnia, HTN, orthostatic hypotension, hepatotoxicity, anorexia

Black Box warning: Risk for suicide

Drug class: Tricyclic antidepressants (TCA)

- Drugs:
 - Amitriptyline (Elavil)
 - Nortriptyline
 - Doxepin
 - o Imipramine
- MOA: Inhibit reuptake of serotonin and norepinephrine, thereby increasing the effects of these
- Indications: Depression
- Off label uses: Fibromyalgia, IBS, migraines, anxiety and withdrawal syndrome
- SE/AE: Anticholinergic effects, ECG changes, CNS depression, orthostatic hypotension, sedation, weight gain
- Black Box warning: Risk for suicide
- Not first line treatment for depression

Drug class: Monoamine oxidase inhibitors (MAOI)

- Drug:
 - Phenelzine (Nardil)
- MOA: Monoamine oxidase inactivates norepinephrine, dopamine, epinephrine and serotonin.
 MAOIs block that, thereby increasing the amount of these neurotransmitters
- Indication: Depression
- Off-label use: Anxiety
- Black Box warning: Risk for suicide
- Interferes with many other medications
- Not first line treatment for depression
- Many contraindications
- SE/AE: Orthostatic hypotension, hypertension when interacting with tyramine, insomnia, anticholinergic effects
- Patient education:
 - Must be educated to avoid foods containing tyramine
 - i.e. aged cheese, salami, bananas, beer and wine
 - o May require 14 days between discontinuation and the starting of certain medications

Drug name: Bupropion (Wellbutrin)

- MOA: Unknown inhibits uptake of norepinephrine and dopamine
- Indications: Depression
 - Sold under the brand Zyban for smoking cessation
- Off label uses: ADHD, bipolar disorder
- SE/AE: Risk for seizures (Highest with high doses or rapid titration) and insomnia
- Black Box warning: Risk for suicide and neuropsychiatric events

Drug name: Trazadone (Oleptro)

- MOA: Inhibits reuptake of serotonin, increasing serotonin effects. Blocks histamine and alpha one adrenergic receptors
- Indication: Depression
- Off label uses: Aggression / agitation related to dementia and insomnia
- SE/AE: Dizziness, drowsiness, dry mouth, ECG changes, orthostatic hypotension
- Black Box warning: Risk for suicide

Drug name: Buspirone (Buspar)

MOA: UnknownIndication: Anxiety

• Off-label use: Depression

• SE/AE: Sexual dysfunction and EPS

Drug class: Benzodiazepines

- Drugs:
 - Lorazepam (Ativan)
 - Diazepam (Valium)
 - Midazolam (Versed)
 - Alprazolam (Xanax)
 - o Clonazepam
- MOA: GABA agonist. GABA is an inhibitory neurotransmitter
- Indications: Seizure disorder, insomnia, anxiety, sedation, muscle relaxant
- SE/AE: Muscle weakness, hypotension, sedation, respiratory depression
- Black box warning: Do not mix with other CNS depressants. Can cause addiction and dependency
- Controlled substance (Schedule IV)
- First line for cessation of acute generalized seizure
- Several benzodiazepines are contraindicated in pregnancy due to teratogenic effects
- Patient education: Do not take with alcohol or other CNS depressants
- Has an approved reversal agent for benzodiazepine overdose called flumazenil

Another drug used for anxiety is propranolol that can help test anxiety and other situational anxiety that presents with physical manifestations such as tachycardia, palpitations, and hypertension

References

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