

Learning Activity 4.1.

Psychotropic Medication Quiz

1. What is the mechanism of action by which antidepressant medications achieve the desired effect (regardless of the different physiological processes by which this action is accomplished)

Most antidepressants increase the concentration of norepinephrine, serotonin, and dopamine.

2. For what must the nurse be on the alert with the client who is receiving antidepressant medication?

Nurse should assess for increased risk of suicide, particularly children and young adults.

3. As the nurse, when would you expect the client to begin showing signs of symptomatic relief after the initiation of antidepressant therapy?

After 2 weeks a patient may show signs of improvement with full therapeutic benefits shown after 4 weeks.

4. Name an example of a tricyclic antidepressant ____ clomipramine (Anafranil) ____.

Name an example of an MAOI ____ phenelzine (Nardil) _____.

Name an example of an SSRI ____ escitalopram (Lexapro) _____.

5. Describe some common side effects and nursing implications for tricyclic antidepressants.

Side effects of tricyclic antidepressants include fatigue, dry mouth, blurred vision, orthostatic hypotension, arrhythmias, constipation, urinary retention.

6. ____ Serotonin syndrome _____ is the most potentially life-threatening adverse effect of MAOIs.

Symptoms for which the nurse and client must be on the alert include: ____ elevated temperature, agitation, muscle rigidity, and irregular heartbeat _____. What must be done to prevent these symptoms from occurring? (Your answer must include some examples.) Avoid taking multiple medications that work on serotonin, monitor for symptoms when change in dose occurs.

7. Lithium carbonate is commonly prescribed for ___bipolar disorder___. Many times when these individuals are started on lithium therapy, the physician also orders an antipsychotic medication. Why might he or she do so?

Antipsychotic medication is prescribed alongside lithium due to lithium's 7 – 10 day lag period after start of treatment. The antipsychotic medication will also increase the effects of lithium.

8. There is a narrow margin between the therapeutic and toxic serum levels of lithium carbonate. What is the therapeutic range? List the initial signs and symptoms of lithium toxicity.

The typical therapeutic range for lithium is 0.6 – 1.2 mEq/L. Initial signs of lithium toxicity include nausea, diarrhea, anorexia, and CNS symptoms such as drowsiness, tremors, and muscle weakness.

9. Describe some nursing implications for the client on lithium therapy.

Monitor lithium levels in patient to prevent lithium toxicity. Assess patient's mood and evaluate effectiveness of medication. Educate patient on possible weight gain with therapy.

10. What is the mechanism of action for anxiolytics (with the exception of buspirone)?

Anxiolytics depress subcortical levels of the central nervous system. They can potentiate the effects of GABA in the brain and produce a calming effect.

11. What is the most commonly used group of anxiolytics? Give two examples.

The most common prescribed anxiolytics are benzodiazepines. Clonazepam (Klonopin) and diazepam (Valium) are two examples of benzodiazepines.

12. What are the most common side effects of anxiolytics?

Common side effects of anxiolytics include drowsiness, dry mouth, blurred vision, hypotension, and physical/psychological addiction.

13. What must the client on long-term anxiolytic therapy be instructed in order to prevent a potentially life-threatening situation?

Patient should be instructed to not stop the medication abruptly as it can cause life-threatening symptoms.

14. What is thought to be the mechanism of action that produces the desired effect with antipsychotic medications?

Antipsychotics work by blocking the postsynaptic dopamine receptors in various locations in the brain.

15. Phenothiazines are an example of a “typical” antipsychotic group. Give two examples of phenothiazines and two examples of the newer “atypical” antipsychotics.

Typical antipsychotic medications include haloperidol and loxapine. Atypical antipsychotic medications include aripiprazole and clozapine.

16. Describe potential adverse hormonal effects associated with antipsychotic therapy.

Hormonal effects of antipsychotic therapy for males include decreased libido, retrograde ejaculation, and gynecomastia; for females, amenorrhea and galactorrhea.

17. Agranulocytosis is a potentially very serious side effect of antipsychotic therapy. The nurse and client should be on the alert for symptoms of ____sore throat____, ____fever____, and ____malaise____.

18. Neuroleptic malignant syndrome (NMS) is a rare but potentially fatal side effect of antipsychotic drugs.

List symptoms for which the nurse must be on the alert when assessing for NMS.

Monitor for symptoms of muscle rigidity, high fever, tachycardia, fluctuating blood pressure, and diaphoresis.

19. Describe the symptoms of extrapyramidal side effects associated with antipsychotic therapy.

Extrapyramidal effects include akathisia, continuous restlessness, akinesia, impairment of voluntary movement, dystonia, involuntary muscle spasms.

20. What is the classification of medication that is commonly prescribed for drug-induced extrapyramidal reactions? Give two examples of these medications.

Two medications that have been approved for treating extrapyramidal reactions are valbenazine (Ingrezza) and tetrabenazine (Austedo). These medications are in the VMAT2 inhibitor class.

21. Describe a potentially life-threatening situation that could occur in the client who abruptly withdraws from long-term use of CNS stimulants.

Abruptly stopping CNS stimulants may cause a rapid rise in blood pressure.

Homework Assignment Questions and Answers

Please read the chapter and answer the following questions:

1. Identify three priority safety concerns for each class of psychotropic medications.

Antianxiety Agents

- Physical/psychological addiction
- CNS depression
- Heart palpitations

Antipsychotics (novel)

- Neuroleptic malignant syndrome
- Seizures
- Tardive dyskinesia

Antipsychotics (phenothiazines and haloperidol)

- Reduction of seizure threshold
- Agranulocytes
- Additive CNS depression with alcohol

MAO Inhibitors

- Coma with concurrent use of opioids
- Disturbances in cardiac rate and rhythm
- Hypotension

SSNRIs

- Discontinuation syndrome due to abruptly stopping medication
- Mania
- Somnolence

SSRIs

- Increased risk of suicide in children and young adults
- Serotonin syndrome
- May increase lithium levels, leading to lithium toxicity

Tricyclic antidepressants

- Increased risk of suicide
- QT prolongation
- Urinary retention

2. Differentiate primary actions and side effects for traditional versus atypical antipsychotics.

	Typical Antipsychotics	Atypical Antipsychotics
Actions	Antagonists that block postsynaptic dopamine receptors in the brain	More potent antagonists of serotonin receptors but weaker dopamine receptor blockers than typical antipsychotics
Side effects	Dry mouth, blurred vision, sedation, urinary retention, tardive dyskinesia, neuroleptic malignant syndrome	Drowsiness, dizziness, headache, hypotension, tachycardia, neuroleptic malignant syndrome

3. Differentiate primary actions and side effects for tricyclic versus SSRI antidepressants.

	Tricyclic Antidepressants	SSRI antidepressants
Actions	Inhibits reuptake of norepinephrine/serotonin at the presynaptic neuron	Selectively inhibits the uptake of serotonin in the CNS
Side effects	Drowsiness, dry mouth, blurred vision, tachycardia, risk of suicide	Headache, insomnia, anorexia, diarrhea, risk of suicide, serotonin syndrome