

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)?

They block the reuptake of serotonin.

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

Serotonin syndrome and suicidal thoughts.

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

4 weeks after the initiation of therapy.

4. Name an example of a tricyclic antidepressant: Amitriptyline, Clomipramine, and Desipramine

Name an example of an MAOI: Isocarboxazid, Phenelzine, and Tranylcypromine

Name an example of an SSRI: Escitalopram, Fluoxetine, and Sertraline

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

Sedation: Nurses should inform patients not to drive or operate machinery when sedation is being experienced.

Tachycardia, arrhythmias: Nurses should monitor vital signs of patients, especially elderly patients who have preexisting cardiovascular conditions.

Photosensitivity: Nurses should recommend the use of sunscreen and educate patients on the risk of severe sunburn.

6. Hypertensive Crisis is the most potentially life-threatening adverse effect of MAOIs. Symptoms for which the nurse and client must be on the alert include: Increased BP, chest pain, and headache. What must be done to prevent these symptoms from occurring? (Your answer must include some examples.)

Diet restrictions such as avoiding foods that are high in tyramine. Foods such as red wines , aged cheeses, smoked or processed meats, and chocolate.

7. Lithium carbonate is commonly prescribed for bipolar disorders. Many times when these individuals are started on lithium therapy, the physician also orders an antipsychotic medication. Why might he or she do so? Patients may need antipsychotics as well because they may be experiencing delusions or having trouble sleeping.

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.

0.6-1.2 mEq/L Levels over 1.5 mEq/L patient will experience nausea, anorexia, muscle weakness, ataxia, drowsiness, etc.

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

Monitor serum lithium levels once or twice a week until serum levels and dosage are stable following the initial treatment and then monthly during maintenance therapy. Blood levels should be drawn 12 hours after the last dose. Educate on potential for weight gain and monitor weights regularly. Instruct patients to avoid operation machinery or motor vehicles while experiencing drowsiness.

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

Inhibit excitation of GABA neurotransmitters in the brain.

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

Benzodiazepines: Clonazepam, Diazepam, Lorazepam, and Alprazolam

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

Drowsiness, hypertension, dry mouth, nausea and vomiting

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

Do not stop medication abruptly.

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

First generation antipsychotics block postsynaptic dopamine receptors.

Second generation antipsychotics are weaker dopamine receptor antagonists but are more potent antagonists of serotonin type 2A receptors.

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

Typical: Chlorpromazine, and Prephenazine

Atypical: Clozapine, and Quetiapine

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

Male: Decreased libido, breast enlargement (gynecomastia), discharge of semen into the bladder instead of through the urethra (retrograde ejaculation)

Female: Absence of a menstrual period (amenorrhea), milky discharge from breast in women who are not breastfeeding (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 hypotension, tachycardia, and fever.

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.

Rigidity, high fever, alterations in mental status, changes in blood pressure and heart rate, rapid breathing, sweating.

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

Akathisia: continuous fidgeting and restlessness

Akinesia: impairment or absence of voluntary movements

Dystonia: involuntary spasms in the muscles of the face, arms, legs, and neck

Oculogyric Crisis: uncontrolled rolling back of the eyes. This is a symptom of acute dystonia. Can be confused with seizure activity. Should be treated as a medical emergency.

Pseudoparkinsonism: drooling, rigidity, tremors, shuffling gait that may appear 1 to 5 days after initiation of antipsychotic medication

Tardive Dyskinesia: abnormal facial and tongue movements, stiff neck, and difficulty swallowing

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

Antidopaminergic Agents: Valbenazine, and Deutetrabenazine

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

There is a risk for suicide as a result of severe depression resulting from abruptly stopping CNS stimulant medications.

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

Paradoxical excitement
Orthostatic hypotension
Blood dyscrasias

Antipsychotics (novel)

Drowsiness
Constipation
Nausea

Antipsychotics (phenothiazines and haloperidol)

Extrapyramidal syndrome
Neuroleptic malignant syndrome
Agranulocytosis

MAO Inhibitors

Flu-like symptoms
Confusion
Hypomania

SSNRIs

Serotonin syndrome
Increased risk of suicide
Constipation

SSRIs

Dizziness
Lethargy
Headache

Tricyclic antidepressants

Hypomania,
Cardiac arrhythmias
Panic attacks

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

Typical

Actions:

-block dopamine type 2 receptors in the brain

S/E:

- tachycardia
- constipation
- decreased sweating
- dry lips
- hazy vision
- urine retention
- EPS
- increases plasma prolactin
- drowsiness
- gaining weight
- difficulty ejaculating
- orthostatic hypotension

Atypical

Actions:

- stronger antagonists of serotonin type 2A receptors but weaker antagonists of dopamine receptors.

S/E:

- potential interactions with some of the drugs
- sedation
- weight gain
- orthostatic hypotension
- dizziness
- blurred vision
- dry mouth
- decreased sweating
- constipation
- urinary retention
- tachycardia

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

Tricyclic

Actions:

- preventing the neurotransmitters norepinephrine and serotonin from being absorbed reabsorbed.

S/E:

- sexual dysfunction
- drowsiness
- gaining weight
- constipation
- dry mouth
- impaired vision
- retention of urine
- tachycardia
- postural hypotension

SSRI

Action:

- prevent serotonin from being reabsorbed (5HT)

S/E:

- headache
- irritability
- nausea
- sexual dysfunction