

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 work to increase the concentration of norepinephrine, serotonin, and/or dopamine through a complex series of interactions in the body.

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

- Suicide ideation and sudden lifts or other dramatic changes in mood.
- Manageable side effects include dry mouth, sedation, and nausea.
- Increased risk for suicide, sedation, discontinuation syndrome, photosensitivity, orthostatic - - hypotension, tachycardia arrhythmias, hyponatremia, blurred vision, constipation

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

Up to 2 weeks before signs of improvement are noted and up to 4 weeks to achieve full therapeutic benefits.

4. Name an example of a tricyclic antidepressant _____ amitriptyline _____.

Name an example of an MAOI _____ isoniazid _____.

Name an example of an SSRI _____ sertraline _____.

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

Orthostatic hypotension, tachycardia, arrhythmias, blurred vision

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: _____ dry mouth, sedation, and nausea _____. What must be done to prevent these symptoms from occurring? (Your answer must include some examples.)

Nursing interventions to prevent these symptoms from occurring can be offering hard candies, ice, and frequent sips of water to alleviate dry mouth, educating the patient on taking this medication at bedtime to minimize the sedation effect, and educating the patient on taking the medication with food to minimize nausea.

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?

Lithium has a lag period of 7 to 10 days so by prescribing antipsychotics in conjunction with Lithium carbonate it may be helpful in initial treatment because of its immediate sedative effects.

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 therapeutic range is 0.6-1.2 mEq/L. Signs and symptoms of lithium toxicity at levels over 1.5 mEq/L include increasing nausea, anorexia, and diarrhea, as well as CNS symptoms such as muscle weakness, drowsiness, ataxia, tremors, and muscle twitching. Higher levels can lead to delirium, seizures, cardiovascular collapse, or death.

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

Because lithium therapy has a narrow therapeutic range, it is important for clients taking lithium to maintain regulatory dietary sodium and fluid intake to avoid major fluctuations in their lithium levels and its effects. In addition, lithium can have a weight gain side effect. As the nurse, you will want to educate the patient about this potential side effect and monitor their weight at regular intervals. This can be prevented by eating low-calorie diets and stressing the importance of not making drastic changes in sodium consumption because of its impact on serum blood levels of lithium.

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

They depress subcortical levels of the central nervous system (CNS), particularly the limbic system and reticular formation.

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

The benzodiazepines are the most commonly used group of anxiolytics. Two examples include estazolam and flurazepam.

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

Drowsiness, confusion, and lethargy

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

Clients on long-term anxiolytic therapy should be instructed not to stop taking these agents abruptly following long-term use as it can produce a life-threatening withdrawal syndrome.

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

The thought is that antipsychotics block postsynaptic dopamine receptors in the basal ganglia.

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

Two examples of phenothiazines are promethazine and methotrimeprazine. Two examples of antipsychotics include aripiprazole and clozapine.

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

Male side effects: decreased libido, retrograde ejaculation (discharge of seminal fluid into the bladder instead of through the urethra), gynecomastia (breast enlargement)

Female side effects: amenorrhea (absence of menses), galactorrhea (milky discharge from breasts of non-breastfeeding woman)

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.

Fever, muscle rigidity, diaphoresis, tachycardia, deteriorating mental status

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

- **Akathisia:** continuous restlessness and fidgeting
- **Akinesia:** absence or impairment in voluntary movement
- **Dystonia:** involuntary muscle spasms in the face, arms, legs, and neck
- **Oculogyric crisis:** uncontrolled rolling back of the eyes
- **Pseudo parkinsonism:** tremor, shuffling gait, drooling, rigidity
- **Tardive dyskinesia:** bizarre 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.

The classification of drugs used to treat EPS are antiparkinsonian agents. Two examples of these medications are carbidopa/levodopa and amantadine.

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

A life-threatening situation that could occur when abruptly stopping long-term use of CNS stimulants include a life-threatening withdrawal syndrome. The most common side effects include restlessness, anorexia, and insomnia.

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

nausea, headache, dizziness

Antipsychotics (novel)

sedation, weight gain, decreased sweating

Antipsychotics (phenothiazines and haloperidol)

blurred vision, urinary retention, tachycardia

MAO Inhibitors

sedation, hypertensive crisis, dizziness

SSNRIs

nausea, insomnia, tremors

SSRIs

nausea, agitation, headache

Tricyclic antidepressants

postural hypotension, tachycardia, sedation

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

Traditional antipsychotics: Their primary action is to relieve psychosis, anxiety, and provide some relief from nausea and vomiting and intractable hiccoughs. Side effects include anticholinergic effects, sedation, weight gain, reduction in seizure threshold, photosensitivity, and extrapyramidal symptoms.

Atypical antipsychotics: Their primary action is to alleviate positive symptoms including hallucinations, delusions, and agitation and may be beneficial in treating some of the negative symptoms. In addition, they are to relieve psychosis, anxiety, and acute mania. Side effects include sedation, weight gain, orthostasis and dizziness, blurred vision, dry mouth, decreased sweating, constipation, urinary retention, and tachycardia.

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

Tricyclic antidepressants: primary action is to reduce depression, relieve severe depression, and prevent panic attacks. Side effects for these medications include sexual dysfunction, sedation, weight gain, dry mouth, constipation, blurred vision, urinary retention, postural hypotension, and tachycardia.

SSRI antidepressants: primary action is to reduce depression, control anxiety, and control obsessions. Side effects include nausea, agitation, headache, and sexual dysfunction.