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 in some way increase or decrease the concentration of norepinephrine, serotonin, or dopamine in the body.

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

   Nurses must be alert for increased risk for suicidal ideation.

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

   2 weeks

4. Name an example of a tricyclic antidepressant_____Amitriptyline _____.

   Name an example of an MAOI_____Selegiline _____.

   Name an example of an SSRI_____Sertraline _____.

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

   Tricyclic antidepressants can cause toxicity when used with duloxetine or bupropion, also has contraindication to MAOI coadministration. May cause sexual dysfunction, sedation, weight gain, dry mouth, constipation, blurred vision, urinary retention, and postural hypotension and tachycardia.

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: Severe headache, N/V, chest pain, SOB, tachycardia. What must be done to prevent these symptoms from occurring? (Your answer must include some examples.)

   To prevent these symptoms from occurring, the patient must implement a diet restriction that heavily limits many foods that contain tyramine. This includes various cheeses and other aged dairy products (yogurt), various types of alcohol (beer) and many kinds of processed or smoked meats.

7. Lithium carbonate is commonly prescribed for _Bipolar Mania_. 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 carbonate has a lag period, so some antipsychotics may be used to “plug the gaps” of initial therapy.

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.

   For acute mania, the range is 1.0 to 1.5 mEq/L. For just maintenance, the range 0.6 to 1.2 mEq/L.
   The initial signs of lithium toxicity include vomiting and diarrhea.

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

   Some implications for the client is that serum lithium needs to be regularly monitored, and education should be given regarding monitoring, drug interactions (consult with doctor), and fluid intake.

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

    They depress subcortical levels of the CNS and potentiate the effects of the GABA neurotransmitter.

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

    Benzodiazepines. Examples include diazepam and clonazepam.

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?

    Do not abruptly withdraw from therapy, and educate on symptoms of withdrawal.

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

    They work by blocking postsynaptic dopamine receptors in the basal ganglia, hypothalamus, limbic system, brainstem, and medulla.

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

    Phenothiazines include haloperidol and loxapine. Two examples of the newer atypical antipsychotics include brexpiprazole and cariprazine.

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

    Some potential adverse hormonal effects include sexual dysfunction and decreased libido.

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 and any form of deteriorating mental status. Also monitor and assess vitals regularly

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

    Muscles spasms or stiffness, acute dystonia and involuntary movements.

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

    Antiparkinsonians, includes carbidopa and pramipexole.

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

A situation which could be life threatening regarding CNS stimulants is one where the patient has increased depression and suicide ideation after stopping abruptly.

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

-common side effects include drowsiness, confusion and lethargy
-sudden withdrawal can be life threatening
-May worsen depression

Antipsychotics (novel)

-Muscle spasms and stiffness
-hyperglycemia, adult-onset diabetes, and weight gain
-cardiovascular disease concerns

Antipsychotics (phenothiazines and haloperidol)

-Extrapyramidal effects
-Hypotension
-Sedation

MAO Inhibitors

-flu-like symptoms possible
-hypomania
-confusion, sedation

SSNRIs

-serotonin syndrome
-increased risk for suicidal ideation
-discontinuation syndrome

SSRIs

-dizziness, lethargy, headaches and hyponatremia

Tricyclic antidepressants

-increased risk for suicide ideation
-may cause sedation
-cardiac arrythmias

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

The primary actions for traditional antipsychotics include anticholinergic effects and blocking the effects of dopamine, and intentional side effects include relief of symptoms for conditions like anxiety and psychosis, but also blurred vision, dry mouth, constipation, urinary retention and tachycardia.

The primary action for atypical antipsychotics is a blockade on serotonin receptors. The side effects of the action also include anxiety relief, as well as mania relief, sedation, weight gain, constipation, urinary retention, and tachycardia.

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

The primary action of tryclic antidepressants include blocking serotonin, norepinephrine, and anticholinergic effects. The side effects include relief from panic attacks and depression, but also sexual dysfunction, sedation, postural hypotension and tachycardia.

The primary effects of SSRI antidepressants include just serotonin reuptake inhibition, and the primary side effects are a reduction in depression and anxiety relief. Side effects include sexual dysfunction, agitation, N/V, and headaches.