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)?

- inhibit the reuptake of monoamines such as serotonin, noradrenaline and dopamine into the presynaptic neuron

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

-watch for signs of worsening depression, behavioral changes and formation of any suicidal ideations.

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

-Therapeutic effects can take up to four weeks to start showing any relief

4. Name an example of a tricyclic antidepressant_____Amitriptyline_____.

   Name an example of an MAOI_____Tranylcypromine_____.

   Name an example of an SSRI_____Prozac_____.

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

-Watch for conversion into a irregular heart rate, dry mouth, blurring of vision and potentially constipation
-Nursing implications can be to monitor HR and B/P and obtain EKG if needed, monitor oral cavity and encourage fluid intake to prevent dry mouth, assess vision and ask about any recent changes and monitor BM schedule and if they are having trouble going to the bathroom.

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:___Headache, nausea, elevated heart rate and BP___.What must be done to prevent these symptoms from occurring? (Your answer must include some examples.)

-Avoid foods that are rich in tyramine

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?

-A antipsychotic is given as well to prevent or limit episodes of mania that the lithium is not currently helping. An antipsychotic will help promote sleep and decrease episodes of anxiety.

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 to 1.2 is considered a therapeutic level. some mild initial symptoms include nausea, vomiting, lethargy, tremors and fatigue.

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

-Monitor neurological status for changes in mental status or development of weakness due to lithium toxicity possibility, assess gastrointestinal system for any development of nausea or vomiting, monitor HR and B/P for changes and obtain EKG if needed for cardiac abnormalities.

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

-It targets the activity of neurotransmitters specifically being dopamine, serotonin and GABA. Doing so helps reduce nervous system activity improving symptoms of anxiety.

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

-Benzodiazepines and SSRI's

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

-Loss of balance, sedations, dizziness, drowsiness and a headache,

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

-Never stop the medication abruptly

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

-It helps reduce the amount of dopamine within the brain to allow other neurotransmitters to function within a homeostatic balance with dopamine.

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

-Compazine and Stelazine, newer atypical antipsychotics would include Latuda and Saphris

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

-they can cause breast enlargement for women and menstrual irregularities. For men it can limit sex drive as well as difficulties forming and maintain an erection.

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

-Very high fever, Tachycardia, Tachypnea, Irregular heartbeat, Altered mental status and High or Low BP

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

-Tardive Dyskinesia, Parkinsonism, Dystonia and Akathisia

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

-Anticholinergics, Two examples would be Benztropine and Diphenhydramine

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

-Depression, Suicidal ideations and Unstable vital signs

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
   -abrupt withdrawal can be life threatening, Increases the effects of other CNS depressants and can also cause drowsiness/confusion or lethargy.

   Antipsychotics (novel)
   -Less effective anticoagulant effects, additive hypotension and additive anticholinergic effects such as anticholinergic toxicity (flushing, dry mouth, AMS, tachycardia, urinary retention and hypertension)

   Antipsychotics (phenothiazines and haloperidol)
   -Lower seizure threshold, Prolonged QT interval and Hyperglycemia including weight gain/Diabetes

   MAO Inhibitors
   -Hypertensive crisis, serotonin syndrome and psychosis

   SSNRIs
   -Serotonin syndrome, Risk for suicidal thoughts or behavior, Seizure and dangerous changes in heart rhythms.

   SSRIs
   -Serotonin syndrome, Hypertensive crisis and a lowered seizure threshold

   Tricyclic antidepressants
   -High fever, seizures and severe hypertension

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

   Traditional- Blocking postsynaptic dopamine receptors in the basal ganglia, hypothalamus, limbic system, brainstem and medulla. SE include mild sedation, dry mouth, constipation, sexual dysfunction, weight gain, tardive dyskinesia and acute dystonia.

   Atypical- They are weaker dopamine receptor antagonists than the first generation, but they are also more potent antagonists of the serotonin type 2A receptors. SE include weight gain, hyperlipidemia, diabetes mellitus, prolonged QTC and myocarditis.

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

   SSRI- They inhibit the reuptake of serotonin allowing the body to have more serotonin activity. SE include nausea, diarrhea, insomnia, constipation, weight gain, agitation, suicidal ideations, drowsiness and low sex drive along with sexual problems

   Tricyclic antidepressants- They inhibit the reuptake of serotonin along with norepinephrine which can help regulate mood, attention and sometimes pain in patients.SE include tremors, confusion, weight gain, heart arrythmias, constipation, orthostatic hypotension, insomnia, dizziness, drowsiness, along with altered sex drive/sexual dysfunction.