Pharmacology Review Class Prep Day 1

Herbal Therapies: Match the herbal medication with the appropriate drug interaction:

A. St. John's Wort ___**2**___	1. Can increase hypoglycemia effects of diabetic medications
B. Ma Huang ___**5**____	2. Decreases effectiveness of oral contraceptives
C. Echinacea ___**4**____	3. Increased Risk for Bleeding
D. Ginger Root ___**1**___	4. Chronic use can decrease the effects of medications for TB, HIV, and cancer
E. Feverfew ___**3**____	5. When combined with a MAOI can cause severe HTN

Mental Health Medications:

1. What is an important teaching point when your client is first prescribed Fluoxetine?
   An important teaching point when your client is first prescribed Fluoxetine is to be cautious for serotonin syndrome which can begin 2-72 hours after starting the medication. To treat this, you can use cooling blankets, anticonvulsants, and/or artificial ventilation.

2. What should you teach your patient who is prescribed Phenelzine?
   Your patient who is prescribed Phenelzine should be taught that the medication is an MAOI and therefore does not "play nice" with other medications and can cause many adverse drug reactions when combined with other medications. Another teaching point is that an increase in dietary tyramine while taking this medication can lead to a hypertensive crisis. This would present as symptoms such as a headache, nausea, tachycardia, and hypertension. It is important to teach to avoid foods with tyramine.

3. What is the main adverse effect of Venlafaxine?
   The main adverse effect of this medication is serotonin syndrome.

4. What antidepressant aids in smoking cessation?
   Bupropion aids in smoking cessation.

5. What is the therapeutic window for lithium? What are S/S of lithium toxicity? What are expected side effects of lithium?
   The therapeutic window for lithium is 0.8-1.4 mEq/L. S/S of lithium toxicity include GI distress, confusion, poor coordination, coarse tremors, sedation. Lithium toxicity is classified as a level of 1.5-2.0 mEq/L. Expected side effects of lithium include GI distress, fine hand tremors, increased thirst, and weight gain.

6. What is the difference between first generation and second-generation antipsychotics? What do you need to teach your patients?
   The difference between first generation and second-generation antipsychotics is that conventional (first gen) antipsychotics target only the positive symptoms where atypical

(second-gen) antipsychotics target both positive and negative symptoms. Another difference is the symptoms that come with each classification. First gens will produce more EPS compared to second gen which will produce fewer EPS. You need to teach your patient that with first gen acute dystonia can occur and it is important to monitor 5hrs-5days after beginning of treatment for this and if signs present to notify provider immediately. TD can also occur as a late EPS, months/years later and can be permanent but this will outweigh how life would have been without the medication. Second gens may alter glucose metabolism causing T2DM and will have generally fewer symptoms than first gen.

Neurological Medications:

1. What is Carbidopa/ Levodopa prescribed to treat?
    a. What is important to teach your client who is taking this drug?

Carbidopa/Levodopa is prescribed to treat symptomatic Parkinson's patients. It is important to teach that it should be taken with food and orthostatic hypotension can be a side effect so slow position changes can be important to prevent falls and injury.

2. Why are anticholinergic drugs prescribed for Parkinson's disease?

Anticholinergic drugs are prescribed for Parkinson's disease as it can decrease the activity of acetylcholine which can maintain a balance between dopamine and acetylcholine receptors in the brain and it is used as adjust to reduce motor symptoms.

3. What is a common drug used to decrease spasticity when treating MS?

A common drug used to decrease spasticity when treating MS is Baclofen (Lioresal) which is a muscle relaxer.

Pain Medications:

1. Opioid/ Narcotic Medications
    a. 1 mg Dilaudid = __**7-11**___mg morphine
2. Name 4 side effects of morphine you should teach your client:
    1. **Nausea (7-70%) – direct stimulation of chemoreceptor**
    2. **Itching (up to 80%) – releases histamine**
    3. **Respiratory Depression**
    4. **Constipation**
3. A client is prescribed a transdermal Fentanyl patch Q72 hours. You applied the patch 30 minutes ago and your patient is still complaining of pain. What would be your priority action?

My priority action would be to explain that the patch can take 12-24 hours to reach its peak of action meaning that the pain relief will not be instant. First, you could attempt non-pharmacologic pain measures and if that fails than move on to other adjunct pain medications via a different route.

Chemotherapy Medications:

1. List three common side effects of cytotoxic chemotherapy:
    a. **N/V**

   b. **Myelosuppression**
   c. **Alopecia**

2. Your client is receiving IV doxorubicin to treat her breast cancer and complains of burning at the IV site. What is your priority intervention? _____**My priority treatment would be to stop the infusion as this drug is a vesicant and can lead to further damage if not stopped.** _____