**PHARMACOLOGY STUDY GUIDE MODULE 1 & 2**

**Ch. 6 – SULFONAMIDES**

1. What kind of microorganism is susceptible to the sulfonamides?

2. What age does a child need to be to safely take one of these drugs?

3. Can pregnant or lactating women take them?

4. What are some of the main uses?

5. What are some main adverse reactions?

6. What kind of reaction is TEN or SJS? What should the nurse do if this occurs?

7. How much fluid intake should the patient taking these drugs be encouraged to drink every day and

why?

8. What steps should the nurse take when applying a topical sulfonamide to a burn?

9. If a patient develops: a. leukopenia what should the nurse look for?

b. thrombocytopenia what should the nurse look for?

10. What advise should the nurse teach the patient concerning photosensitivity?

11. What are some important teaching points for patients who are taking these drugs? What specific

instructions should be given for patients taking sulfonamides?

12. Why is a culture and sensitivity sometimes done before ordering antibiotics?

13. What herbal therapy is sometimes used for UTI’s and why? Does it treat or prevent a UTI?

14. What information should the nurse know before giving a sulfonamide?

*Medications to focus on: (What is it used for? Adverse reactions? Pt education?)*

* Sulfadiazine
* Sulfasalazine
* Trimethoprim (TMP) and Sulfamethoxazole (SMZ)
* Mafenide
* Silver Sulfadiazine

**Ch. 7 – PENICILLINS**

1. What is bacterial resistance? What are some examples of this? What patient teaching can be

done to help prevent this?

2. What are the most common adverse reactions of the penicillins?

3. What are some common uses?

4. What is the difference between a superinfection, an allergic reaction and an adverse reaction?

Give an example of each.

5. If a patient who does not have an infection has a penicillin ordered, what is the likely reason?

6. What is the most severe allergic reaction? How should this reaction be treated?

7. What advice pertaining to birth control pills should be given to a woman who is taking them and a

penicillin?

8. How long should a patient wait in the outpatient area after receiving a penicillin IM and why?

9. Certain drugs like Augmentin and Zosyn contain certain chemicals like clavulanic acid or

tazobactam (β-lactamase inhibitors). How do they make the penicillin more effective?

10. What herbal remedy is sometimes used as an “herbal antibiotic”?

11. What information should the nurse know before giving a penicillin?

12. What can the nurse recommend to reduce the risk of a superinfection during antibiotic therapy?

13. What would the nurse do for a patient who developed stomatitis or glossitis as a result of any of

the antibiotics?

14. What would the nurse do for a patient who developed diarrhea as a result of any of the

antibiotics?

**Ch. 7 - CEPHALOSPORINS**

1. What is the main difference between the 1st, 2nd, 3rd, and 4th generation of the cephalosporins?

2. What are the most common adverse reactions of the cephalosporins? What are some of the most

severe or life threatening?

3. What are some common uses?

4. What is the relationship between an allergy to penicillin and a cephalosporin?

5. Why is alcohol not to be consumed within 72 hours of taking some of the cephalosporins?

6. Severe diarrhea could be an indication of what kind of superinfection? (Hint: see Ch 9)

7. What should the nurse look for if a patient is developing nephrotoxicity? What should the nurse

do?

8. What information should the nurse know before giving a cephalosporin?

**Ch. 7 CARBAPENEMS**

1. What are the most common adverse reactions of the carbapenems?

2. What are some common uses?

3. Could these likely be given to patients who are allergic to the penicillins or the cephalosporins?

Why or why not?

4. What information should the nurse know before giving a carbapenem?

**Ch. 7 MISCELANEOUS ANTI-INFECTIVES - VANCOMYCIN**

1. What is the action of this drug?

2. What are the most common adverse reactions of vancomycin?

3. What are some common uses?

4. What can happen if vancomycin is given with other ototoxic or nephrotoxic drugs like the

aminoglycosides or chemotherapy?

5. Why must vancomycin IV be given over a period of 60 minutes or more?

6. What information should the nurse know before giving vancomycin?

*Medications to focus on: (What is it used for? Adverse reactions? Pt education?)*

* Penicillin (all types)
* Ampicillin
* Ampicillin and clavulanate
* Piperacillin and tazobactam
* Cefazolin
* Cephalexin
* Cefuroxime
* Cefdinir
* Ceftriaxone
* Cefepime
* Ertapenem
* Meropenem
* Vancomycin

**Ch. 8 TETRACYCLINES**

1. What is the action of these drugs?

2. What are the most common adverse reactions of the tetracyclines?

3. What are some common uses?

4. a. What foods should not be given with tetracyclines? What drugs should not be given?

b. How long should the nurse wait to give a tetracycline if these food or drugs are ingested?

5. What are some signs and symptoms of a possible superinfection?

6. What patient teaching should be given concerning sun exposure?

7. Would a pregnant woman be able to safely take these drugs? What age group could safely take

them?

8. What advice pertaining to birth control pills should be given to a woman who is taking them and a

tetracycline?

9. What information should the nurse know before giving a tetracycline?

**Ch. 8 AMINOGLYCOSIDES**

1. What is the action of these drugs?

2. What are the 3 most common adverse reactions of the aminoglycosides?

3. What are some common uses?

4. What should the nurse monitor(S&S, labs, vital signs) concerning the adverse reactions. What

should the nurse do for each of these reactions?

5. What information should the nurse know before giving an aminoglycoside?

6. If a patient who is taking these drugs develops severe diarrhea, what could be the likely cause?

What will the nurse do if this occurs?

**Ch. 8 MACROLIDES and LINCOSAMIDES**

1. What is the action of these drugs?

2. What are the most common adverse reactions of the macrolides and lincosamides?

3. What are some common uses?

4. What information should the nurse know before giving a macrolide or a lincosamide?

5. If a patient who is taking these drugs develops severe diarrhea, what could be the likely cause?

What will the nurse do if this occurs?

*Medications to focus on: (What is it used for? Adverse reactions? Pt education?)*

* Doxycycline
* Tetracycline
* Gentamicin
* Neomycin
* Streptomycin
* Azithromycin
* Clindamycin
* Lincomycin
* Daptomycin

**Ch. 9 FLUOROQUINOLONES**

1. What is the action of these drugs?

2. What are the most common adverse reactions of the fluoroquinolones?

3. What are some common uses?

4. What age group should not receive a fluoroquinolone?

5. What should the nurse teach the patient about preventing sunburn while receiving one of these

drugs?

6. What type of drug should not be given at the same time with a fluoroquinolone?

7. What minerals should not be given at the same time?

8. What tendon is most likely to rupture? Which patients are most at risk of this happening?

9. Which part of the body does a bacterial superinfection most often occur? What are the S&S?

10. What is “pseudomembranous colitis” and what organism causes it?

11. Which part of the body does a fungal superinfection most often occur? What are the S&S?

12. What are the names of some of the organisms that cause superinfections?

13. Can superinfections occur with any antibiotic?

*Medications to focus on: (What is it used for? Adverse reactions? Pt education?)*

* Ciprofloxacin
* Levofloxacin
* Metronidazole

**Ch. 11 ANTIVIRALS**

1. What is the action of these drugs?

2. What are the most common adverse reactions of the antiviral drugs?

3. What are some common uses?

4. What is the difference between a labeled use and an unlabeled use?

5. What are some examples of different viruses?

6. What is the pregnancy category of ribavirin? What precautions should be taken regarding this?

7. How can St. John’s Wort affect the treatment of HIV patients who are taking protease inhibitors?

8. What education should you give a patient who is taking acyclovir?

*Medications to focus on: (What is it used for? Adverse reactions? Pt education?)*

* Acyclovir
* Valacyclovir
* Ribavirin (Inhalation and combo)

**Ch. 12 ANTIFUNGALS**

1. What is the action of these drugs?

2. What are the most common adverse reactions of the antifungal drugs?

3. What are some common uses?

4. What is another name for an antifungal infection?

5. What is the difference between a superficial and systemic fungal infection?

6. What are some herbs that are used for antifungal properties?

7. What is the most serious adverse reaction to amphotericin B? How would the nurse detect this?

**Ch. 12 ANTIPARASITICS & ANTIPROTOZOALS – metronidazole**

1. Why is this drug given?

2. What are the main adverse reactions?

3. What are the special considerations?

4. What education will you give relating to:

- alcohol consumption

- trichomoniasis infections

*Medications to focus on: (What is it used for? Adverse reactions? Pt education?)*

* Amphotericin B
* Fluconazole
* Ketoconazole
* Doxycycline
* Metronidazole