Pharmacotherapy: A Pathophysiologic Approach 10th Edition TESTBANK

Tenth Edition

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Chapter 1: Health Literacy and Medication Use

1. What time will the trough blood level need to be drawn if the nurse administers the intravenous medication dose at 9:00 AM?

a. 6:30 AM

b. 8:30 AM

c. 9:30 AM

d. 11:30 AM

ANS: B

Trough blood levels measure the lowest blood level of medicine and are obtained just before the dose is administered. In this case, 6:30 AM is too early to obtain the blood level. The other two times occur after the medication is administered.

2. What will the nurse expect the health care providers order to be when starting an older adult patient on thyroid hormone replacement therapy?

a. Administering a loading dose of the drug

b. Directions on how to taper the drug

c. A dosage that is one third to one half of the regular dosage

d. A dosage that is double the regular dosage

ANS: C

To prevent toxicity, dosages for new medications in older adults should be one third to one half the amount of a standard adult dosage. Loading doses of drugs could cause severe toxicity. Tapering off is characteristic of discontinuation of medications and is not appropriate for this situation. Older adults generally need a lower medication dosage than younger patients.

DIF: Cognitive Level: Application REF: p. 29 OBJ: 3

TOP: Nursing Process Step: Implementation

MSC: NCLEX Client Needs Category: Physiological Integrity

3. Which drugs cause birth defects?

a. Teratogens

b. Carcinogens

c. Metabolites

d. Placebos

ANS: A

Teratogens are drugs that cause birth defects. Carcinogens cause cancer. Metabolites are the end product of metabolism. Placebos are drugs that have no pharmacologic activity.

4. Which life threatening illness may occur as a result of aspirin (salicylate) administration during viral illness to patients younger than 20 years of age?

a. Anaphylactic shock

b. Reyes syndrome

c. Chickenpox

d. Influenza A

ANS: B

Children are susceptible to Reyes syndrome if they ingest aspirin at the time of or shortly after a viral infection of chickenpox or influenza. Anaphylactic shock is caused by a hypersensitivity reaction. Chickenpox is the result of being infected with a virus. Influenza A is caused by a pathogen.

5. Which classification of medications commonly causes allergic reactions in children?

a. Antacids

b. Analgesics

c. Antibiotics

d. Anticonvulsants

ANS: C

Antibiotics, especially penicillins, commonly cause allergic reactions in children. Intravenous antibiotics can cause rapid reactions; therefore, the pediatric patients response to a medication should be assessed and monitored closely. Antacids rarely cause allergic reactions. Children are not particularly allergic to analgesics or anticonvulsants.

6. After giving instructions to an expectant mother about taking medications during pregnancy, which patient statement indicates the need for further teaching?

a. I will not take herbal medicines during pregnancy.

b. For morning sickness, I will try crackers instead of taking a drug.

c. If I get a cold, I will avoid taking nonprescription medications until I check with my physician.

d. I will limit my alcohol intake to only one glass of wine weekly.

ANS: D

Alcohol needs to be eliminated during pregnancy and for 2 to 3 months prior to conception. Limited studies are available regarding the use of herbal medications in general, and thus they should be avoided during pregnancy. Alternative nonpharmacologic treatments are appropriate to use during morning sickness. The pregnant woman should also avoid using nonprescription drugs because few data are available about safe use in pregnancy. Because few medicines can be considered completely safe for use in pregnancy, the physician needs to approve and recommend the use of nonprescription drugs.

7. When is the ideal time for a nursing mother to take her own medications?

a. Before the infant latches on to begin to breastfeed

b. As soon as the mother wakes up in the morning

c. Right before the mother goes to sleep at night

d. As soon as the infant finishes breastfeeding

ANS: D

Taking medications after breastfeeding reduces the amount of the medication that will reach the baby. Medications taken directly before breastfeeding may have a high concentration in the milk and possibly pass on to the baby. The mother must take into consideration when her medications are ordered to be taken, and schedule them around breastfeeding.

8. Which age-related change would affect transdermal drug absorption in geriatric patients the most?

a. Difficulty swallowing

b. Diminished kidney function

c. Changes in pigmentation

d. Altered circulatory status

ANS: D

The decreased circulation that occurs with aging will affect transdermal drug absorption. Difficulty swallowing would not affect transdermal drugs being absorbed. Kidney function affects drug excretion. Changes in pigmentation would not affect transdermal drug absorption.

9. Which intervention would be considered to reduce accumulation of a drug in a patient who has decreased liver function?

a. Decreasing the time interval between dosages

b. Reducing the dosage

c. Administering the medication intravenously

d. Changing the drug to one that has a longer half life

ANS: B

Dosages must be reduced to prevent accumulation. Decreasing the time interval between dosages would increase the accumulation of the drug. The intravenous route has the fastest absorption and with liver dysfunction would increase the accumulation of the drug. A similar drug with a longer half life would stay in the system longer; with impaired liver function, the result would be increased accumulation.

10. The nurse is teaching an elderly patient with difficulty swallowing about his medications. Which explanation by the nurse is most helpful?

a. Enteric coated tablets can be crushed and taken with applesauce.

b. Tablets that are scored can be broken in half.

c. Medications labeled SR can be crushed.

d. Avoid taking medications in liquid form.

ANS: B

It is acceptable to break scored tablets in half to facilitate swallowing of the medication. Enteric coated tables should never be crushed because of the effect on the absorption rate and potential for toxicity. Medications labeled SR indicate sustained release and should not be crushed because of the effect on the absorption rate. Medication in liquid form may be easier to swallow.

11. The nurse is administering an antibiotic intravenously. Which blood level determines the lowest amount of medication present in the patient?

a. Peak

b. Serum

c. Therapeutic

d. Trough

ANS: D

The lowest amount of a medication in the blood is the trough. The peak is the highest amount of medication in the blood. Serum level identifies the amount of medication present. Therapeutic levels identify the range in which a medication is effective.

12. Which patient would the nurse identify as having the lowest rate of absorption of enteral medications?

a. A 5-year-old boy

b. An 18-year-old woman

c. A 55-year-old man

d. An 85-year-old woman

ANS: A

Males stomachs empty more rapidly; children have increased motility, resulting in decreased absorption time. As one gets older, gastrointestinal (GI) motility is decreased, allowing for increased absorption time; women have slower gastric emptying, resulting in more time for absorption. Males stomachs empty more rapidly; however, as one gets older, GI motility is decreased, resulting in an increase in absorption time. As one gets older, GI motility is decreased, allowing for increased absorption time; women have slower gastric emptying, resulting in more time for absorption.

13. What is the definition of cumulative effect of a drug?

a. Drug toxicity related to overmedication

b. Drug buildup related to decreased metabolism

c. The inability to control the ingestion of drugs

d. The need for higher dosage to produce the same effect as previous lower dosages

ANS: B

Cumulative effects are related to diminished metabolism or excretion of a drug that causes it to accumulate. Cumulative effects can lead to drug toxicity. Toxicity occurs when adverse effects are severe. Inability to control the ingestion of drugs is drug dependence. The need for higher dosage to produce the same effect as previous lower dosages is the definition of tolerance.

14. Which patient, when compared with the general population, would require a larger dose or more frequent administration of a drug to attain a therapeutic response?

a. A 29 year old who has been diagnosed with kidney failure

b. A 35 year old obese male who is being evaluated for an exercise program

c. A 52 year old diagnosed with hypothyroidism and decreased metabolic rate

d. A 72 year old with decreased circulatory status

ANS: B

An obese individual would require a larger dose of a drug to attain a therapeutic response. An individual with kidney failure would require less medication because of decreased excretory