Preview Test: First Pass Effect and Route of Administration Quiz

Test Information
Description
Instructions: Please work with no more than one other person to answer this quiz.
Timed Test: This test has a time limit of 1 hour. This test will save and submit automatically when the time expires. Warnings appear when half the time, 5 minutes, 1 minute, and 30 seconds remain. [The timer does not appear when previewing this test]
Attempts: Not allowed. This test can only be taken once.
Force Completion: This test can be saved and resumed at any point until time has expired. The timer will continue to run if you leave the test.

Question Completion Status:

Save All Answers  Save and Submit

QUESTION 1
If a drug is applied topically to the eye to treat disease of the eye, is the drug absorbed into the eye exposed to the first pass effect?

☐ A. Yes
☐ B. No

QUESTION 2

1 points  Save Answer
If a drug is applied topically to the eye to treat disease of the eye, is the drug that drains down through the nasal lacrimal duct exposed to the first pass effect?

- A. Yes
- B. No

**QUESTION 3**

Which route of administration would you consistently expect the amount of drug administered (the dose) to equal the amount of drug that reaches the systemic circulation?

- A. Nasal
- B. Rectal
- C. Oral
- D. IM
- E. IV

**QUESTION 4**

When the oral dose of a drug is doubled, which of the following occurs?

- A. F doubles
- B. $C_{max}$ remains unchanged
- C. AUC doubles
- D. None of the above

**QUESTION 5**
The bioavailability of a drug is 0.6. When the dose of the drug is doubled which of the following occurs?

- A. AUC doubles, amount of drug reaching the systemic circulation doubles, and F stays the same
- B. AUC doubles, amount of drug reaching the systemic circulation doubles, and F doubles
- C. AUC doubles, amount of drug reaching the systemic circulation stays the same, and F doubles
- D. AUC stays the same, amount of drug reaching the systemic circulation doubles, and F doubles

**QUESTION 6**

1 points  Save Answer

The absolute bioavailability of a buccal fentanyl dosage from is 0.69. Approximately 50% of the total dose of is absorbed from the buccal mucosa. The remaining 50% is swallowed and about 20% of the total dose escapes the first pass effect. If the dose is 400 mcg, how much drug reaches the systemic circulation?

- A. 400 mcg
- B. 276 mcg
- C. 200 mcg
- D. 80 mcg

**QUESTION 7**

1 points  Save Answer

The absolute bioavailability of a buccal fentanyl dosage from is 0.69. Approximately 50% of the total dose of is absorbed from the buccal mucosa. The remaining 50% is swallowed and about 20% of the total dose escapes the first pass effect. If the dose is 400 mcg, how much drug reaches the systemic circulation via the buccal mucosa?

- 400 mcg
- 276 mcg
- 200 mcg
- 76 mcg

**QUESTION 8**

1 points  Save Answer
The absolute bioavailability of a buccal fentanyl dosage from is 0.69. Approximately 50% of the total dose of is absorbed from the buccal mucosa. The remaining 50% is swallowed and about 20% of the total dose escapes the first pass effect. If the dose is 400 mcg, how much drug reaches the systemic circulation via the swallowed route?

- 400 mcg
- 276 mcg
- 200 mcg
- 76 mcg

**QUESTION 9**

1 points  Save Answer

Which of the following is required before a drug can be absorbed?

- A. Infusion
- B. Diffusion
- C. Disintegration
- D. Dissolution

**QUESTION 10**

1 points  Save Answer

Most drugs are absorbed by passive diffusion, implying that drugs are absorbed

- A. from low concentration at the absorption site to high concentration in the plasma.
- B. in a non-concentration dependent fashion
- C. from high concentration at the absorption site to low concentration in the plasma.