

Section 2. Acid reflux

Please answer the multiple-choice-questions below.

1. The main working mechanism of proton-pump inhibitors (e.g. omeprazole) concerns

- reducing the gastric acid secretion
- neutralizing gastric acid in the stomach
- bactericidal effects on *Helicobacter pylori*
- creating a protective coating over ulcers
- blocking dopamine receptors in the gastrointestinal system

2. The first-line treatment of peptic ulcers caused by *Helicobacter pylori* infection is a combination of antibiotics with

- H₂-antagonist (e.g. ranitidine)
- antacid (e.g. aluminium hydroxide)
- proton-pump inhibitor (e.g. omeprazole)
- antiemetic (e.g. metoclopramide)
- anti-inflammatory agent (e.g. prednisolone)

3. Which of the following drugs is the most likely to increase the risk of peptic ulcers?

- heparin sodium
- ibuprofen
- metoclopramide
- phenytoin
- paracetamol (acetaminophen)

4. How can proton-pump inhibitors primarily alter the absorption of other drugs?

- by increasing the gastric pH
- by decreasing the gastric pH
- by formation of insoluble complexes
- by reducing the intestinal motility
- by reducing bile salt formation

5. The effect of which of the following drugs can be decreased when combined with omeprazole?

- miconazol
- clopidogrel
- coumarin
- tetracycline
- acetylsalicylic acid

Section 2. Pain management

Please answer the multiple-choice-questions below.

1. Which of the following drugs inhibits the prostaglandin synthesis?

- fluoxetine
- amitriptyline
- ibuprofen
- morphine
- codeine

2. Which of the following drugs is most likely to cause respiratory depression?

- amitriptyline
- morphine
- ibuprofen
- paracetamol (acetaminophen)
- acetylsalicylic acid

3. Which of the following drugs is most likely to decrease the kidney function (eGFR)?

- paracetamol (acetaminophen)
- morphine
- prednisolone
- ibuprofen
- amitriptyline

4. Which of the following drugs is most likely to cause fatal liver damage when overdosed?

- ibuprofen
- codeine
- paracetamol (acetaminophen)
- amitriptyline
- acetylsalicylic acid

5. Which of the following drugs is most likely to enhance the risk of GI bleeding conferred by NSAIDs?

- enalapril
- furosemide
- simvastatin
- fluoxetine
- amlodipine

Section 2. Antibiotics

Please answer the multiple-choice-questions below.

1. Erythromycin belongs to which group of antibiotics?

- β -lactams
- macrolides
- tetracyclines
- aminoglycosides
- quinolones

2. Which pathway in bacteria is mainly inhibited by penicillin (e.g. amoxicillin)?

- RNA synthesis
- cell wall synthesis
- protein synthesis
- DNA synthesis
- folic acid metabolism

3. Which one of the following is a common early side effect of penicillin?

- constipation
- vision loss
- orthostatic hypotension
- skin rash
- tooth discoloration

4. Which of the following types of antibiotics is most likely to cause nephrotoxicity?

- penicillin
- macrolide
- aminoglycoside
- tetracycline
- quinolone

5. The absorption of tetracyclines (e.g. doxycycline) is reduced when taken with which of the following product(s)?

- tyramine-containing food (e.g. red wine, aged cheeses)
- grapefruit
- alcohol
- dairy products (e.g. milk, yogurt)
- high-fiber foods (e.g. whole grain)

Section 2. Cardiovascular risk management

Please answer the multiple choice questions below.

1. Which of the following antihypertensive drugs is first choice treatment in a diabetes type II patient with microalbuminuria?

- amlodipine
- methyldopa
- hydrochlorothiazide
- enalapril
- bisoprolol

2. Which of the following antihypertensive drugs inhibits the reabsorption of sodium and chloride in the distal convoluted tubule of the nephron?

- enalapril
- furosemide
- amlodipine
- metoprolol
- hydrochlorothiazide

3. Which of the following types of antihypertensive drugs is most likely to cause hypokalemia?

- calcium antagonists
- beta-blockers
- ACE-inhibitors
- thiazide diuretics
- angiotensin receptor blockers

4. Which of the following antihypertensive drugs is most likely to cause bradycardia?

- enalapril
- hydrochlorothiazide
- metoprolol
- amlodipine
- spironolactone

5. Which of the following types of antihypertensive drugs can mask the symptoms of hypoglycemia in diabetes patients?

- calcium antagonists
- beta-blockers
- ACE-inhibitors
- thiazide diuretics
- angiotensin receptor blockers