### **Introduction in Clinical Pharmacy**

Which of the listed preparations should be used as antidote and included into the first-aid kit required at factories where acute intoxications with arsenic, mercury, chrome and bismuth compounds possible?

- A. Unithiolum
- **B.** Adrenalinum
- C. Atropinum
- D. Morphinum
- E. Droperidolum

Which drug of the given below is a first aid antidote for acute poisoning caused bv arsenic, mercury, chromium, and bismuth compounds?

- A. Dimercaprol (Unithiol)
- B. Prednisolone
- C. Atropine
- **D.** Adrenaline
- E. Morphine

38-year-old male patient with A mercuric chloride intoxication has been delivered to the admission ward in grave condition. What antidote must immediately administered patient?

- A. Unithiol
- **B.** Dipyroxime
- C. Atropine
- D. Nalorphine
- E. Izonitrozinum

Treatment of poisonings with inorganic mercury compounds includes the use of the following antidote:

- A. Unithiol
- **B.** Naloxone
- C. Tetacinum-calcium
- **D.** Desferal
- E. Dexamethasone

A patient with chronic heart failure, who has been taking cardiac glycosides, developed signs of glycoside intoxication. What antidote would be advisable in this case?

#### A. Unithiol (DMPS)

- B. Vicasol (Menadione)
- C. Protamine
- D. Naloxone
- E. Methionine

During the treatment of chronic heart failure with digoxin in a patient having bradycardia, nausea, vomiting, blurred vision. Which drug is the antidote in this case?

- A. Unithiol
- **B.** Tetacinum calcium
- C. Dipiroximum
- **D.** Amyl nitrite
- E. Atropine sulphate

A child has accidentally drunk a solution that was used by his grandmother for glaucoma treatment. The solution turned out to be pilocarpine hydrochloride. What drug can be used as an antidote?

- A. Atropinum
- B. Carbacholinum
- C. Aceclidinum
- **D.** Benzohexonium
- E. Pentaminum

A patient suffering from trombophlebitis of his lower extremities has developed symptoms of heparin overdosage. What drug can be used as an antidote?

- A. Protamine sulfate
- **B.** Phenindione (Phenylin)
- C. Dipiridamol
- D. Pentoxifylline
- E. Theophylline

A patient receives heparin for acute myocardial infarction. On the third day the patient developed hematuria and subcutaneous hematomas. What medicine should be

What preparation is the specific antidote case intoxication of with preparations?

A. Deferoxamium

prescribed as an antidote in this case? **B.** Protamine sulfate A. Protamine sulfate C.Bemegridum B. Vicasol (Menadione) **D.** Atropinum C. Streptokinase E. Penicillamine D. Clopidogrel E. Acetylsalicylic acid Which drug with antagonistic effect can be A 45-year-old patient has been taking used to stop bleeding caused by prolonged neodicumarinum for thrombophlebitis for two weeks. The regular blood test use of neodicumarinum? revealed a decrease in prothrombin A. Vikasolum concentration, microhematuria. **B.** Aminocapronic acid Which C. Etamsylate drug should be used as neodicumarinum **D.** Fibrinoge antagonist? E. Ascorbic acid A. Vicasol **B.** Protamine sulfate **C.** Sodium citrate **D.** Heparin E. Aminocaproic acid During a surgical operation the muscle patient with signs of morphine relaxant tubocurarine chloride was used. intoxication has been delivered into an What antagonist drug should be injected admission room. Name the necessary in order to allow the patient to brief antidote: independently? A. Naloxone A. Neostigmine **B.** Collargol B. Dithylinum C. Essentiale C. Cytitonum **D.** Ectericidum E. Trental (Pentoxifylline) **D.** Aethimizolum E. Benzohexonium 5-year-old child had accidentally A woman who has been treated for drunk a bottle of eye drops. After 30 infiltrative focal tuberculosis for a long minutes the child developed shortness of complains of acute hearing impairment. Which of the following breath, difficult swallowing, voice hoarseness, dilated pupils, hyperthermia. preparations might be the cause of this Which of the drugs might have induced side effect? the described manifestations? A. Streptomycin A. Atropine **B.** Isoniazid **B.** Adrenaline C. Ethambutol C. Mesatonum **D.** Rifampicin

- **D.** Pilocarpine
- E. Novocaine

A woman with open tuberculosis is undergoing in-patient treatment in the tuberculosis clinic. What drug was prescribed by her physician for etiotropic treatment?

#### A. Isoniazid

- B. Acyclovir
- C. Metronidazole

E. Ethionamidum For treatment of enteric infection a 36-yearold woman was prescribed a nitrofuran derivative that is poorly absorbed in the intestine and takes its effect along the

#### A. Nifuroxazide

B. Furacilin (Nitrofural)

intestinal tract. Name this drug:

D. Doxycycline hydrochloride	C. Nitroxoline
E. Benzylpenicillin (Penicillin G)	D. Furadonin (Nitrofurantoin)
	E. Nalidixic acid
From the pharmaceutical stock select a	What antiprotozoal agent can be
reversible anticholinesterase drug to be	recommended to a female patient with
administered to the patients with atony of	trichomoniasis?
the intestine and urinary bladder in the	A. Metronidazole
postoperative period:	<b>B.</b> Primaquine
A. Proserin	C. Chloridinum
<b>B.</b> Phosphacolum	<b>D.</b> Solusurminum
C. Benzohexonium	E. Chiniofonum
<b>D.</b> Atropine sulfate	
E. Dithylinum	
After a craniocerebral trauma a patient was	A patient suffering from neurosis
administered pyracetam. This drug relates to	accompanied by anxiety and fear
the following pharmacological group:	development was prescribed diazepam.
A. Nootropic agent	What pharmacological effect makes it
<b>B.</b> Nonnarcotic (nonopioid) analgetic	possible to apply the drug for this disease
C. Tranquilizers	treatment?
<b>D.</b> Anesthetic agent	A. Anxiolytic
E. Neuroleptic	<b>B.</b> Antiarrhythmic
	C. Anti-inflammatory
	<b>D.</b> Hypotensive
	E. Antianginal
What antibiotic has beta-lactam cycle in its	At the end of the dug action drug
structure?	addicts develop severe mental,
A. Benzylpenicillin potassium salt	neurological and somatic disorders.
<b>B.</b> Doxycycline hyclate	This complex of symptoms is called:
C. Chloramphenicol	A. Withdrawal syndrome
<b>D.</b> Streptomycin sulfate	B. Tachyphylaxis
E. Lincomycin hydrochloride	C. Sensibilization
	<b>D.</b> Cumulation
	E. Tolerance
Genetically induced adverse reaction to a	A patient suffering from allergic
certain drug is caused by various enzyme	rhinitis was prescribed ephedrine in
defects. Name this reaction:	form of nasal drops. The patient has
A. Idiosyncrasy	significantly benefited from nasal
<b>B.</b> Withdrawal syndrome	instillation, and this stimulated him to
C. Steal syndrome	use the drug every 2 hours. But under
<b>D.</b> Rebound effect	these conditions the drug appeared to
E. Dysbiosis	be ineffective. What is the most likely
	cause of this phenomenon?
	A. Tachyphylaxis
	B. Drug dependence
	C. Idiosyncrasy
	<b>D.</b> Allergy
	E. Cumulation

A patient has been receiving palliative treatment with morphine hydrochloride for a week. Following that the patient demands continuation of this treatment. What phenomenon has occurred in this case?

### A. Dependence

- B. Tolerance
- C. Cumulation
- D. Potentiation
- E. Summation

Rifampicin is a cytochrome P450 inducer; therefore, its interaction with other chemically active drugs:

# A. Can decrease concentration of other drugs

- **B.** Can increase concentration of other drugs
- **C.** Has no effect on concentration of other drugs
- **D.** Can result in binding with other metabolites
- **E.** Has no effect on toxicity of other drugs

A patient with moderately severe pneumonia has been administered ceftriaxone 1 time per day. The drug should be taken once a day due to its following property:

- A. Slow excretion
- **B.** Presence of bactericidal action
- **C.** Wide range of action
- **D.** Cumulative ability
- **E.** Poor absorption from the injection site

For thrombosis treatment a patient was prescribed a drug from the group of direct anticoagulants. What drug is it?

- A. Heparin
- **B.** Fenilin (phenylinum)
- C. Syncumar
- D. Neodicumarin
- E. Vikasol

A patient, who has been taking acetylsalicylic acid, has developed hemorrhages of mucous membranes. This phenomenon is associated with:

# A. Inhibition of prothrombin synthesis

- **B.** Increased absorption in gastrointestinal tract
- **C.** Decreased absorption in gastrointestinal tract
- **D.** Disorder of protein binding
- **E.** Changed volume of distribution

An internship doctor prescribed his patient nifuroxazid from the group of nitrofurans for the treatment of urinary tracts infection. The doctor made a mistake because:

# A. It cannot be absorbed from the digestive tract

- **B.** It is excreted with urine in the inactive state
- C. It has nephrotoxic effect
- **D.** It has bacteriostatic effect
- **E.** It is excreted from the organism very slowly

A patient being treated in the infectious disease ward for dysentery is administered phthalazol. What is the reason for phthalazol being used only for treatment of enteric infections?

# A. The drug is not absorbed from the gastrointestinal tract

- **B.** The high degree of reabsorption in the kidneys
- **C.** Slowly eliminated from the body

Absorption of tetracycline preparations will be reduced when they are administered simultaneously with antacids. This is an example for:

# A. Pharmacokinetic incompatibility

- **B.** Pharmaceutical incompatibility
- **C.** Pharmacodynamic incompatibility

- **D.** Rapidly absorbed in the gastrointestinal tract
- E. Rapidly excreted in unchanged form

A patient was prescribed an oral antibiotic for treatment and an antacid to remove heartburn symptoms. If the drugs are taken simultaneously their interaction can result in the following:

- A. Antibiotic malabsorption
- **B.** Relative overdosage
- **C.** Inhibition of hepatic microsomal enzymes
- **D.** Mutual potentiation
- E. Acceleration of metabolism and excretion

When dispensing an antacid and ofloxacin in tablets, the dispensing chemist warned the customer that these drugs should be taken separately with 2- hour interval in between.

- A. Decreases ofloxacin absorption
- **B.** Increases of loxacin absorption
- **C.** Increases antacid effectiveness
- **D.** Decreases antacid effectiveness
- E. Increases risk of dysbiosis

A patient suffering from epilepsy has taken phenobarbital for a long time and developed drug tolerance. What is the mechanism of this phenomenon Simultaneous taking of both drugs: development?

- A. Acceleration of biotransformation
- **B.** Absorption process reduction

**D.** Drugs synergism

preparations

blood proteins

iron preparations

iron preparations

in the body

iron

E. Functional drugs antagonism

administered together with antacids:

Advise an internship doctor on why

A. This causes malabsorption of

B. This causes increased binding to

C. This prevents deposition of iron

D. This increases intoxication with

E. This accelerates elimination of

should

not

- C. Receptor's sensitivity enhancement
- **D.** Inhibition of biotransformation
- E. Accumulation of substances in the body

In case of simultaneous use of metronidazole and oral anti-coagulants derived from coumarin patients must be warned about:

- A. Potentiation of anticoagulants effect and risk of bleeding
- **B.** Reduction of anticoagulants effect
- C. Potentiation of metronidazole effect
- **D.** Reduction of metronidazole effect
- E. Higher neurotoxicity

Simultaneous use of gentamicin and acyclovir tablets increases the risk of:

- A. Nephrotoxicity
- **B.** Hepatotoxicity
- C. Cardiotoxicity
- **D.** Neurotoxicity
- **E.** Allergic reactions

Simultaneous use of doxycycline hydrochloride and oral contraceptive causes:

- A. Reduction of oral contraceptives effectiveness
- **B.** Increase of oral contraceptives effectiveness
- C. Increase of antibacterial effect of doxycycline
- **D.** Reduction antibacterial of effect of doxycycline

Simultaneous use of paracetamol and acetylcysteine causes:

- paracetamol A. Reduction of hepatotoxicity
- **B.** Reduction of anti-inflammatory action of paracetamol
- C. Inhibition of paracetamol

	absorption
	<b>D.</b> Increase of mucolytic action of
	acetylcysteine
	<b>E.</b> Increase of paracetamol
	nephrotoxicity
A patient who has taken phenobarbital	A patient suffering from moderately
for a long time was prescribed	severe pneumonia was prescribed
diclofenac sodium. However the anti-	ceftriaxonum once a day. Prescription
inflammatory effect of diclofenac	of ceftriaxonum once a day is due to
appeared to be less than expected due to	the fact that the drug:
the pharmacokinetic interaction of these	A. Is slowly eliminated from the
drugs. Such interaction might be the	body
result of the following processes:	<b>B.</b> Has bactericidal effect
A. Accelerated drug metabolism	<b>C.</b> Is pluripotential
in liver	<b>D.</b> Accumulates in the
<b>B.</b> Decelerated drug metabolism in	lungs
liver	<b>E.</b> Is poorly absorbed from
<b>C.</b> Reduced protein concentration in	the injection site
plasma	the injection site
<b>D.</b> Change of receptor sensibility	
<b>E.</b> Increased drug dosage	
Name the reason for the reduction of	A 25 year old woman is in the third
anticoagulant effect of syncumar when it	
_	regular examination, US detected a
is applied in combination with phenobarbital:	malformation in the fetus. Medical history
A. Phenobarbital activates microsomal	
	of the patient shows that she was taking
liver enzymes <b>B.</b> Phenobarbital inhibits microsomal	large doses of diazepam without
liver enzymes  C. Dovelopment of syngumer allorest	type of side effect has occurred in this case?
<b>C.</b> Development of syncumar allergy	A. Teratogenic
<b>D.</b> These drugs are antagonists	B. Embryotoxic
<b>E.</b> Mutual inactivation	C. Fetotoxic
	D. Carcinogenic
Dongathing hongydponicilling is the days of	E. Mutagenic
Benzathine benzylpenicillin is the drug of	
choice for treatment of the following disease:	
A. Syphilis  B. Intestinalinfoction	
<b>B.</b> Intestinalinfection	
C. Pneumonia	

**D.** Tonsillitis**E.** Furunculosis

## **Clinical Pharmacy in Cardiology**

Cililical Filarmac	y iii Caraiology
A patient after acute myocardial infarction	A patient, who had a case of cardiac
has been recommended to take	infarction, is recommended to take
acetylsalicylic acid for 3-4 months. What	acetylsalicylic acid to:
effect of acetylsalicylic acid would be	A. Decrease thrombocyte aggregation
most relevant for this patient?	B. Decrease body temperature
A. Antiplatelet	C. Dilate coronary vessels
<b>B.</b> Antipyretic	D. Decrease inflammation
C. Analgesic	E. Lower cholesterol rate
<b>D.</b> Antiinflammatory	
E. Spasmolytic	
A 60-year-old patient, who had suffered a	A 52-year-old patient had myocardial
myocardial infarction, was prescribed	infarction and was discharged from
acetylsalicylic acid as an antiaggregant.	the hospital after the stationery
Specify the optimal daily dosage of	treatment. What daily dose of
acetylsalicylic acid for antiaggregatory effect:	acetylsalicylic acid should be
A. 100 mg	administered in order to prevent
B. 200 mg	thrombosis?
C. 300 mg	A. 100 mg
D. 400 mg	<b>B.</b> 500 mg
E. 500 mg	<b>C.</b> 1000 mg
	<b>D.</b> 200 mg
	<b>E.</b> 50 mg
A dispensing chemist was addressed by	A patient with myocardial infarction
a patient with the prescription of	has been given an intravenous
acetylsalicylic acid as antiaggregant.	injection of a direct-acting
What daily dosage in grams should be	anticoagulant. Select it among the
recommended for him to take on a	listed drugs:
regular basis?	A. Heparin
A. $0,1-0,3$	<b>B.</b> Neodicumarinum
<b>B.</b> 0,5-1,0	C. Vikasolum
<b>C.</b> 1,0-2,0	<b>D.</b> Thrombin
<b>D.</b> 2,0-3,0	E. Calcium gluconate
<b>E.</b> Over 4,0	
Which drug is used for thrombolysis in	Which of the drugs listed below is
case of acute myocardial infarction?	used for thrombolytic therapy of
A. Alteplase	myocardial infarction?
<b>B.</b> Acetylsalicylic acid	A. Streptokinase
C. Heparin	<b>B.</b> Heparinum
<b>D.</b> Pentoxifylline	C. Phenylinum
E. Fraxiparine	<b>D.</b> Ticlopidine
	<b>E.</b> Acetylsalicylic acid
A 46-year-old patient is diagnosed	A patient suffering from essential
with cardiac infarction. What drug	hypertension has increased
should be prescribed for thrombolytic	concentration of renin in blood plasma.
thomony	Which phormacological group chould be

therapy?

concentration of renin in blood plasma. Which pharmacological group should be

- A. Streptokinase
- **B.** Nitroglycerine
- **C.** Spironolactone (Verospiron)
- **D.** Drotaverine hydrochloride
- E. Trimeperidine (Promedol)

A patient with a history of essential hypertension has been administered lisinopril. What is the mechanism of action of this drug?

- A. It inhibits ACE
- **B.** It inhibits alpha-adrenergic receptors
- **C.** It inhibits beta-adrenergic receptors
- **D.** It stimulates beta-adrenergic receptors
- E. It inhibits M-cholinergic receptors

What hypotensive drug is an agent of choice for the patients suffering from arterial hypertension with concomitant type I diabetes mellitus?

- A. Lisinopril
- **B.** Hydrochlorothiazide
- **C.** Atenolol
- **D.** Labetalol
- E. Carvedilol

A patient was warned that taking the prescribed preparation might cause cough. What drug is it?

- A. Lisinopril
- B. Clonidine
- C. Phenihidine
- D. Dichlothiazide
- E. Metoprolol

A patient with essential hypertension complains of infrequent occurrences of dry cough. Clinical and X-ray examination of the respiratory organs revealed no pathologies. What drug from those taken by the patient can cause cough as a side effect?

- A. Captopril
- **B.** Diltiazem

preferred for this patient treatment?

- A. ACE inhibitors
- **B.**  $\alpha$ -adrenoblockers
- C. Diuretics
- **D.** Blockers of calcium channels
- E. Sympatholytics

A 24-year-old patient has been suffering for diabetes mellitus type I for 8 years. Diabetic nephropathy provoked development of symptomatic arterial hypertension. Which of the folowing drugs is indicated for long-term therapy?

- A. Enalapril
- B. Propranolol
- C. Clonidine
- **D.** Dibazol
- E. Dichlothiazide

A patient with hypertension has been administered one of antihypertensive drugs. Blood pressure dropped back to normal, but the patient has developed a persistent dry cough. Which of the following drugs has such a side effect?

- A. Enalapril maleate
- **B.** Propranolol
- C. Clonidine
- **D.** Furosemide
- E. Nifedipine

A patient suffering from hypertension consulted a doctor about dry cough that was presumably provoked by antihypertensive therapy. What antihypertensive drug had she been taking?

- A. Lisinopril
- **B.** Atenolol
- C. Nifedipine
- **D.** Furosemidum
- E. Hydrochlorthiazide

A patient who has been treated for hypertension complains of cough. Objective examination reveals no changes in the lungs. Which of the following drugs might have caused cough?

- A. Captopril
- **B.** Amlodipine

- C. Hydrochlorothiazide
- **D.** Nebivolol
- **E.** Prestarium (Perindopril)

A patient developed dry cough while undergoing pharmacotherapy for arterial hypertension. What group of drugs can be characterized by this side effect?

#### A. ACE inhibitors

- B. Calcium antagonists
- C. Antipsychotics
- D. Tranquilizers
- E. Antacids

hypertensive patient has administered lisinopril. What side effect is typical for this drug?

- A. Dry cough
- **B.** Constipation
- C. Increased appetite
- **D.** Insomnia
- E. Vomiting

A patient suffering from arterial hypertension and chronic bronchitis suddenly presented with dry cough and dyspnea. Body temperature remained unchanged. It is known that the patient takes captopril. These symptoms can be explained by increased generation of:

- A. Bradyquinine
- **B.** Angiotensin-1
- C. Renin
- **D.** Aldosterone
- E. Natriuretic peptide

Losartan as a part of treatment of arterial hypertension is contraindicated in case of:

- A. Pregnancy
- **B.** Hyperglycemia
- **C.** Urine acid diathesis
- **D.** Hyperlipidemia

- C. Hypothiazide
- **D.** Nebivolol
- E. Clonidine

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- A. Bradykinin
- **B.** Angiotensin I
- C. Renin
- **D.** Aldosterone
- E. Natriuretic peptide

A 56-year-old patient suffering from essential hypertension was prescribed an inhibitor of angiotensin converting enzyme (ACE) and a potassium-sparing diuretic. Such combination is:

- A. Unreasonable because it increases risk of hyperkaliemia development
- **B.** Reasonable because it decreases risk of hyperkaliemia development
- **C.** Reasonable because it potentiates hypotensive effect of ACE inhibitor
- **D.** Unreasonable because it reduces hypotensive effect of ACE inhibitor
- E. Unreasonable because it increases of risk orthostatic collapse development

hypertension A patient with administered metoprolol for the arterial pressure reduction. What is its mechanism of action?

- A. Beta adrenoreceptor blockade
- **B.** Alpha adrenoceptor blockade
- C. Indirect adrenomimetic action

#### E. Hypokalemia

A 54-year-old hypertonic patient undergoing pharmacotherapy developed bronchial spasm. His physician considers it to be a therapyinduced complication caused by the drug that belongs to the following group:

### A. β-adrenergic blockers

- B. Calcium antagonists
- C. α-adrenergic blockers
- D. Ganglionic blockers
- E. Diuretics

A 52-year-old patient complains of having increased arterial pressure for a month. She has a 5-year history of bronchial asthma. What group of hypotensive drugs should NOT be recommended this patient?

- A.  $\beta$ -adrenoreceptor blockers
- **B.** Calcium channel blockers
- **C.** Tranquilizers
- **D.** Angiotensin receptor blockers
- E. Diuretics

60-year-old patient has essential hypertension stage II, coronary disease, bronchial asthma. After pharmacotherapy patient the exhibited correction bronchospastic attack, intensified dyspnea. What drug provoked this complication?

- A. Propranolol
- B. Nifedipine
- C. Euphyllinum
- **D.** Mucaltinum
- E. Salbutamolum

A 35-year-old patient with tachycardia has been administered propranolol. Which of the following reactions may be caused by the use of beta-blockers?

- A. Bronchospasm
- B. Drug dependence
- C. Cumulation
- **D.** Blood pressure rise
- E. Constipations

A 48-year-old woman addressed a dispensing chemist with complaints of constipations developing after she had started treatment of her chronic cardiovascular disease. What drug can slow down intestinal peristalsis?

- **D.** Antispasmodic
- E. Angiotensinic receptors blockade

Which of the listed pharmacolgical groups of antihypertensive drugs is contraindicated the patients with bronchial asthma?

#### A. Beta-adrenergic blocking agent

- B. ACE inhibitor
- C. Calcium channel blockers
- D. Angiotensin receptors blockers
- E. Diuretics

patient suffering from bronchial asthma was diagnosed with essential hypertension. What antihypertensive drug is contraindicated for this patient?

- A. Propranolol
- B. Captopril
- C. Amlodipine
- D. Hypothiazid (Hydrochlorothiazide)
- E. Verapamil

Recommend a drug for the treatment of tachyarrhythmia episodes:

- A. Propranolol
- **B.** Adrenaline
- C. Atropine
- **D.** Caffeine sodium benzoate
- E. Dobutamine

What drug may cause the development of constipation in patients undergoing combined arterial therapy for hypertension?

- A. Verapamil
- **B.** Furosemide
- C. Trimetazidine
- D. Pananginum

E. Acetylsalicylic acid in small doses
What drug may cause the development of constipation in patients undergoing therapy combined for arterial hypertension?

#### A. Verapamil

- A. Verapamil
- **B.** Folicacid
- C. Losartan
- **D.** Ascorbic acid
- E. Enalapril

A 70-year-old patient consulted a doctor about elevated arterial pressure. He has a history of benign hyperplasia of prostate. What drug should be administered in this case?

- A. Doxazosin
- **B.** Enalapril
- C. Propranolol
- **D.** Diltiazem
- E. Losartan

A 53-year-old woman suffers from ischemic heart disease and angina pectoris. What drug can be used to stop angina pectoris attacks?

- A. Nitroglycerine
- **B.** Drotaverine hydrochloride
- C. Propranolol
- D. Dipiridamol
- E. Acetylsalicylic acid

A 70-year-old patient with stenocardia claims that the pharmacy sold him a drug that relieved an attack of stenocardia but instead caused an acute bursting headache. What antihypertensive drug is this side effect typical for?

- A. Nitrosorbide
- B. Amlodipine
- C. Nifedipine
- D. Trimetazidine
- E. Metoprolol

A patient with angina pectoris takes longacting nitrates. Consult him what side-effect is the most common for these drugs:

- A. Headache
- **B.** Nausea
- C. Vomiting
- D. Diarrhea
- E. Constipation

- **B.** Furosemide
- C. Trimetazidine
- **D.** Pananginum
- **E.** Acetylsalicylic acid in small doses

A pharmacy customer complains of constricting retrosternal pain that irradiates into the left arm; he fears that he may die. The pain appeared suddenly after physical exertion. Name the first aid medicine in this case:

- A. Nitroglycerine
- B. Metacycline
- C. Naphthyzin (Naphazoline)
- D. Panangin
- E. Riboxin (Inosine)

After an emotional stress a 60-year-old patient presented with chest pain irradiating to the left arm. Specify a drug that relieves pain in this case:

- A. Nitroglycerine
- B. Nifedipine
- C. Diltiazem
- **D.** Propranolol
- E. Metoprolol

In order to arrest stenocardia attacks a patient takes nitroglycerin capsules. What is the rational way of the drug introduction?

- A. Sublingual
- **B.** Peroral
- C. Rectal
- **D.** Inhalation
- E. Hypodermic

A patient has been taking isosorbide for stenocardia prevention for quite a long time. Now he notes a significant decrease in the effect of the drug. What is this phenomenon called?

- A. Tolerance
- **B.** Cumulation
- C. Physical dependence
- **D.** Allergy
- E. Potentiation

A 45-year-old man has been taking long- 6 months af

6 months after treatment a patient with

acting nitrates twice a day for a year. Currently the decrease in effectiveness of the pharmacotherapy is being observed. What side-effect can be suspected in the first place?

- A. Development of nitrate tolerance
- B. Progressing ischemic heart disease
- C. Progressing coronary atherosclerosis
- **D.** Myocardial infarction
- E. Impairment of coronary circulation

A 63-year-old man suffering from ischemic heart disease was diagnosed with angle closure glaucoma. What group of drugs is CONTRAINDICATED in this case?

- A. Nitrates
- B. β-adrenergic blockers
- C. Calcium antagonists
- D. Anticoagulants
- E. Statins

A hypertensive patient had been administered a diuretic as a part of the combined therapy. The administered drug caused hypokalemia. Specify this drug:

- A. Hydrochlorothiazide
- **B.** Amiloride
- C. Spironolactone
- **D.** Allopurinol
- E. Triamterene

Treatment course of essential hypertension includes diuretics. Which diuretic DOES NOT NEED to be combined with potassium preparations?

- A. Triamteren
- B. Clopamide
- C. Dichlothiazide
- **D.** Furosemide
- E. Ethacrynic acid

A 59-year-old patient has been using furosemide for a long time to treat his cardiac insufficiency. What drug for hypokalemia prevention should be used in the given case?

- A. Panangin (Potassium aspartate and magnesium aspartate)
- **B.** Thiotriazolinum
- C. Acetylsalicylic acid
- D. Trimetazidine

coronary heart disease developed tolerance to the prolonged-action nitrates. What drug with nitrate-similar effect should be recommended in this case?

- A. Molsidomine
- B. Nifedipine
- C. Prazosin
- **D.** Verapamil
- E. Metoprolol

A patient with arterial hypertension, who takes captopril, was prescribed a potassium-sparing diuretic, spironolactone. What complication can develop in the patient due to this combination of drugs?

- A. Hyperkalemia
- B. Hypocalcemia
- C. Hyponatremia
- D. Hypoglycemia
- E. Hypernatremia

Select a loop diuretic of strong, emergency and short-term action from the listed below:

- A. Furosemide
- **B.** Clopamide
- C. Acetazolamide
- **D.** Spironolactone
- E. Triamterene

Which of the following anti-hypertensive drugs has potassium-sparing action?

- A. Triamterene
- **B.** Furosemide
- C. Prazosin
- **D.** Metoprolol
- E. Diltiazem

A 68-year-old female patient has been continuously taking furosemide for heart failure treatment. What drug should be used to prevent hypokalemia in patients taking furosemide?

- A. Panangin
- **B.** Atp-long
- C. Mildronatum
- **D.** Trimetazidine
- E. Sustac forte

E. Enalapril	
A 67-year-old patient with chronic heart	A patient with atherosclerosis has been
failure takes digoxin. In order to reduce	administered an anti-atherosclerotic agent.
its side effects the patient's doctor	Specify this drug:
recommended to combine it with the	A. Phenofibrate
followig drug:	<b>B.</b> Ascorbic acid
A. Panangin	C. Pyracetam
<b>B.</b> Calcium gluconate	<b>D.</b> Dexamethasone
C. Euphyllinum	E. Phenylbutazone
<b>D.</b> Hydrochlorthiazide	
E. Calcium chloride	
A 68-year-old man has been prescribed a	A 65-year-old male patient complains
hypolipidemic agent as a part of his	of nausea, vomiting, lethargy, seeing
combination therapy for ischemic heart	yellow spots in front of his eyes. The
disease. Name this drug:	patient takes daily 0,25 mg of digoxin,
A. Atorvastatin	100 mg of aspecardum, 50 mg of
<b>B.</b> Nitroglycerine	metoprolol. What pathological
C. Lisinopril	condition is this syndrome typical for?
<b>D.</b> Nifedipine	A.Glycoside intoxication
E. Hydrochlorothiazide	<b>B.</b> Food poisoning
	<b>C.</b> Withdrawal syndrome
	<b>D.</b> Tachyphylaxis
	E. Hypersensitivity reaction
A 43-year-old woman has come to a	
pharmacy with complaints of sharp headache	
in the occipital area, palpitations, «visual	
snow» in her eyes, nausea; her BP is 180/110	
mm Hg. These symptoms correspond with:	
A. Hypertensic crisis	
<b>B.</b> Migraine attack	
C. Exertional angina pectoris attack	
<b>D.</b> Cervical osteochondrosis	

**E.** Acute conjunctivitis

## **Clinical Pharmacy in Pulmonology**

A female patient with pneumonia has been administered doxycycline hydrochloride. This drug relates to the following group of antibiotics:

- A. Tetracyclines
- B. Aminoglycosides
- C. Macrolides
- **D.** Cephalosporins
- E. Penicillins

In course of pharmacotherapy of bronchitis a patient was found to have dyspeptic disorders, photodermatitis, liver dysfunction. Which of the prescribed drugs might have caused these manifestations?

- A. Doxycyclin
- **B.** Paracetamolum
- C. Ascorbic acid
- D. Acetylcysteinum
- E. Codeine phosphate

Select the optimal antibacterial drug for the treatment of mycoplasma pneumonia:

- A. Rovamycin
- **B.** Gentamicin
- C. Penicillin
- **D.** Ampicillin
- E. Amoxiclav

A 26-year-old patient was diagnosed with community-acquired pneumonia provoked by mycoplasma. Choose the appropriate antimicrobial preparation for the patient treatment:

- A. Rovamycine
- **B.** Amoxicillin
- C. Gentamycinum
- **D.** Benzylpenicillinum
- E. Amoksiklav

A pregnant woman fell ill with severe pneumonia. Which of these antimicrobials should be administered to this patient?

- A. Cefotaxime
- **B.** Gentamicin sulfate
- C. Tetracycline hydrochloride
- D. Ofloxacin
- E. Biseptol

A female patient in the first trimester of pregnancy has been diagnosed with acute pyelonephritis. What is the antibiotic drug of choice for treating this patient?

- A. Amoxicillin
- B. Norfloxacin
- C. Gentamicin
- **D.** Chloramphenicol
- E. Amikacin

A gravida in her 20th week of gestation got ill with pneumonia. What chemotherapeutical drug may be administered with no risk for the fetus development?

- A. Benzylpenicillinum
- B. Gentamycin
- C. Sulfalenum
- **D.** Laevomycetinum
- E. Ofloxacinum

A 6-year-old child with pneumonia had been administered an antibiotic. After treatment the child lost the hearing (became deaf). What group of antibiotics might have caused this complication?

- A. Aminoglycosides
- B. Cephalosporins
- C. Macrolides
- D. Natural penicillins
- E. Semi-synthetic penicillins

A patient, who has undergone treatment for community-acquired pneumonia, complains of hearing impairment. What antibacterial drug could result in such a side-effect?

A 65-year-old man with communityacquired pneumonia was prescribed antibiotic agent amikacin. It should be kept in mind, that amikacin has the following

- A. Gentamicin
- **B.** Amoxicillin/clavulanate
- C. Cefazolin
- D. Ciprofloxacin
- E. Clarithromycin

A 63-year-old woman suffering from diabetic nephropathy with functional disturbance of the kidneys needs etiotropic treatment for focal pneumonia. What drug is

CONTRAINDICATED in this case?

#### A. Aminoglycosides

- B. Natural penicillins
- C. Synthetic penicillins
- D. Macrolides
- E. Combined penicillins

A patient with bronchial asthma was prescribed salbutamol that has led to relief of bronchospasm symptoms. This is associated with stimulation of:

- A.  $\beta_2$ -adrenoreceptors
- **B.**  $\alpha$ 1-adrenoreceptors
- **C.** Muscarinic cholinoreceptors
- **D.** Acetylcholine synthesis
- **E.**  $\beta_1$ -adrenoreceptors

A patient with bronchial asthma has been administered a drug from the group of beta-adrenergic agonists. Specify this drug:

- A. Salbutamol
- **B.** Diazepam
- C. Doxycycline hydrochloride
- **D.** Nitroglycerine
- E. Digoxin

Bronchodilatory effect of short-acting  $\beta_2$ -adrenoceptor agonist salbutamol develops after:

- A.5-10 minutes
- **B.** 20-30 minutes
- **C.** 45-60 minutes
- **D.** 2-3 hours
- **E.** 4-6 hours

side-effect:

- A. Ototoxicity
- **B.** Red coloring of urine
- C. Vomiting
- **D.** Increased blood pressure
- E. Decreased blood pressure

Treatment of a patient who has developed an attack of bronchial asthma for the first time should be started with:

### A. Inhalation of \$\mathbb{G}\_2\$-agonists

- B. Inhalation of glucocorticosteroid
- C. Agonists parenterally
- D. M-anticholinergic drugs
- E. H<sub>2</sub>-histamine blockers

Select a drug for the treatment of bronchial asthma from the group of  $\Re_2$ -agonists:

- A. Salbutamol
- B. Aminophylline
- C. Atrovent
- **D.** Ketotifen
- E. Beclomethasone

When fenoterolum for inhalations is not available in a pharmacy, it can be substituted by the following drug from the group of bronchoselective beta-2-adrenomimetics:

- A. Salbutamolum
- **B.** Isadrinum
- C. Metacinum
- **D.** Ephedrinum
- E. Euphyllinum

A 40-year-old patient suffers from bronchial asthma and cardiac rhythm disturbance in form of bradyarrhythmia. Drugs of which pharmacological group should be administered for bronchospasm elimination?

- A. Muscarinic receptor blockers
- **B.** Beta-adrenoceptor blockers
- C. Muscarinic cholinomimetics
- **D.** Anticholinesterase drugs
- E. Muscle relaxants

a history of A 67-year-old patient who undergoes eart rhythm treatment for bronchial asthma presents with

A 40-year-old patient has a history of bronchial asthma and heart rhythm

disorders in form of bradyarrhythmia. Bronchospasm can be eliminated by the drugs of the following pharmacological group:

### A. M-cholinergic antagonists

- **B.** ß-blockers
- **C.** *M*-cholinomimetics
- **D.** Cholinesterase inhibitors
- **E.** Muscle relaxants

During an asphyxiating attack the patient with bronchial asthma was given intravenously a drug that caused nausea, headache, excitation, and palpitations as side effects. What drug can cause such reaction?

### A. Euphylline (Aminophylline)

- B. Prednisolone
- C. Ambroxol
- D. Suprastin (Chloropyramine)
- E. Papaverine hydrochloride

A 5-year-old boy suffering from pneumonia has problems with mucus expectoration. A doctor prescribed him a mucolytic drug that stimulates surfactant synthesis. Name this drug:

#### A. Ambroxol

- B. Carbocisteine
- C. Mucaltin
- D. Acetylcysteine
- E. Potassium iodide

patient Recommend a with acute mucolytic bronchitis a drug that facilitates expectoration:

### A. Acetylcysteine

- **B.** Glaucine
- C. Loratadine
- D. Diclofenac sodium
- E. Drotaverine hydrochloride

A patient with chronic bronchitis gets glaucine hydrochloride at a pharmacy. The patient must be warned about the following typical side effect of this drug:

### A. Arterial pressure drop

- **B.** Excitation of the central nervous system
- C. Irregular heartbeat
- **D.** Increased intraocular pressure

limb tremor, headache, insomnia, extrasystole. What drug might have caused such symptoms?

- A. Theophylline
- **B.** Prednisolone
- C. Tavegyl
- **D.** Intal
- E. Acetylcysteine

A patient has a history of chronic bronchitis. Recommend him an expectorant which can be purchased at facilitate pharmacy to expectoration of thick and viscous mucus:

- A. Ambroxol
- **B.** Falimint
- C. Glauvent
- **D.** Libexin
- **E.** Salbutamol

A 46-year-old pharmacy customer suffers from chronic bronchitis and needs a medicine to facilitate expectoration of thick viscous sputum. What drug is indicated in this case?

#### A. Ambroxol

- B. Oxeladin
- C. Salbutamol
- D. Butamirate

E. Codeine phosphate
Which of the following drugs should be used for prevention of bronchial asthma attacks?

### A. Cromolyn sodium

- **B.** Salbutamol
- C. Drotaverine
- **D.** Diphenhydramine hydrochloride
- E. Ambroxol

E. Allergic skin rash	

## **Clinical Pharmacy in Rheumatology**

A 33-year-old woman who has been treated for chronic polyarthritis for a long time complains about arterial pressure rise, change of adipose tissue distribution, menstrual cycle disorder. What preparation has she taken?

- A. Prednisolone
- **B.** Indometacin
- C. Butadion
- **D.** Synaflan
- E. Diclofenac sodium

Examination of a patient who has been treated for rheumatoid arthritis for a long time revealed hyperglycemia. What drug might have caused it?

- A. Dexamethasone
- B. Diclofenac sodium
- **C.** Ibuprofen
- D. Chloroquine
- E. Levamisole

A 43-year-old patient with a severe form of rheumatoid arthritis has been administered a certain drug for background therapy. Specify this drug:

- A. Methotrexate
- B. Diclofenac sodium
- C. Nimesulide
- **D.** Prednisolone
- E. Methylprednisolone

A 52-year-old patient has been diagnosed with gouty arthritis, phase 2. What drug should be basic in treatment of this patient?

- A. Allopurinol
- **B.** Hydrochlorothiazide
- C. Paracetamol
- **D.** Furosemide
- E. Penicillin

A 34-year-old patient suffering from systemic lupus erythematosus takes methylprednisolone. On examination the patient's blood calcium is revealed to below. A doctor suspects osteoporosis development. It is necessary to prescribe the patient calcium preparations and:

- A. Vitamin D<sub>3</sub>
- **B.** B-group vitamins
- C. Vitamin C
- **D.** Vitamin A
- E. Vitamin E

It is necessary to prescribe non-steroid anti-inflammatory drug for patient with rheumatoid arthritis and concomitant duodenal ulcer. Which drug is the drug of choice in this case?

- A. Celecoxib
- **B.** Acetylsalicylic acid
- C. Paracetamol
- **D.** Analgin
- E. Diclofenac sodium

A 57-year-old patient is diagnosed with rheumatoid arthritis. Anamnesis states peptic ulcer disease. What nonsteroidal anti-inflammatory drug can be recommended for this patient?

- A. Celecoxib
- B. Diclofenac
- C. Aspirin
- D. Indometacin
- E. Mefenamic acid

Which anaesthetic, anti-inflammatory, the least harmful for the stomach

Help the doctor to select a drug from the group of non-steroidal antiinflammatory drugs, which is an inhibitor of COX-2 and does not damage the stomach:

- A. Celecoxib
- B. Acetylsalicylic acid
- C. Indomethacin
- **D.** Paracetamol
- **E.** Diclofenac sodium

A patient with osteoarthritis (gonarthrosis) and peptic gastric ulcer

preparation can be recommended to a patient with exacerbation of rheumatoid arthritis?

- A. Celecoxib
- **B.** Diclofenac sodium
- C. Acetylsalicylic acid
- D. Ibuprofenum
- **E.** Indometacinum

A pharmacy received a newgeneration nonsteroid anti-inflammatory drug "meloxicam" that mainly blocks cyclooxygenase-2. What advantages does this preparation have in comparison with other nonsteroid anti-inflammatory drugs?

- A. Minimal side effect on alimentary tract
- **B.** Evident myospasmolytic action
- C. Interferonogenic properties
- **D.** Minimal side effect on hematogenesis
- **E.** Significant inhibition of protease activity

in anamnesis must be prescribed a NSAID (nonsteroidal antiinflammatory drug). What drug would be the most safe for this patient?

#### A. Meloxicam

- **B.** Acetylsalicylic acid
- C. Ibuprofen
- D. Indometacin
- E. Metamizole sodium

Which of the following nonsteroid anti-inflammatory agents has the least harmful effect on mucosa of gastrointestinal tract?

- A. Nimesulide
- **B.** Diclofenac
- C. Indomethacin
- D. Piroxicam
- E. Acetylsalicylic acid

## **Clinical Pharmacy in Gastroenterology**

A 20-year-old man suffers from chronic A patient suffering from stomach ulcer was prescribed an antiulcer drug that hyperacid type B gastritis. Choose the also reduces secretion of hydrochloric antisecretory agent. A. Omeprazole acid and inhibits Chelicobacter pylori. **B.** Drotaverine hydrochlorid What drug is it? C. Clarithromycin A. Omeprazole **B.** Gastrocepine D. Levofloxacin C. Maalox E. Metoclopramide **D.** Famotidine E. Almagel A patient with peptic ulcer disease has A man with gastric ulcer is prescribed antideveloped black-colored Helicobacter pylori therapy. On the 3rd day feces during the patient developed black coloring of feces. combined pharmacotherapy. Name the drug What had caused such changes? that can be the cause of this development: A. Bismuth subcitrate A. Bismuth subcitrate **B.** Omeprazole **B.** Famotidine C. Metronidazole C. Omeprazole **D.** Tetracycline D. Lansoprazole E. Ranitidine E. Tinidazole During anti-Helicobacter quadrotherapy In the course of clinical instrumental patient's feces colored black. What drug could examination a 45-year-old patient was diagnosed with chronic helicobacterhave caused this effect? associated type B gastritis. What group A. Bismuth subcitrate of drugs should be prescribed first of B. Omeprazole C. Amoxicillin all? D. Clarithromycin A. Anti-Helicobacter pylori E. Metronidazole agents **B.** Prokinetic agents C. Antacids **D.** Reparative drugs E. Anti-Muscarinic agents A patient suffering from stomach ulcer Several cholesterol gallstones was prescribed almagel. Which of its detected in the gallbladder of a woman. pharmacological properties is intended Choose the drug to dissolve and excrete for treatment of this pathology? the stones: A. HCl neutralization A. Ursodeoxycholic acid **B.** Papaverine **B.** Local anaesthetization C. Domperidone C. Blocking H2-histamine the **D.** Loperamide receptors **D.** Blocking E. Platyphyllin the muscarinic cholinoreceptors E. Anti-inflammatory action A patient with cholelithiasis should be A patient has chronic pancreatitis with administered the following drug for the apparent presentations of pancreatic exocrine hypofunction. Which of the dissolution of cholesterol gallstones:

A. Ursodeoxycholic acid	following drugs would be the most
<b>B.</b> Gamma-aminobutyric acid	advisable in this case?
C. Acetylsalicylic acid	A. Pancreatinum
<b>D.</b> Citric acid	<b>B.</b> Drotaverine
E. Mefenamic acid	C. De-Nol
	<b>D.</b> Omeprazole
	E. Acidin pepsinum
A patient has a history of cholelithiasis.	
What drug should be administered to	
prevent biliary colic?	
A. Magnesium sulfate	
<b>B.</b> Almagel	
C. Contrycal	
<b>D.</b> Bisacodyl	
E. Pancreatin	

## **Clinical Pharmacy in Hepatology**

A man with a long history of chronic hepatitis has been diagnosed with pneumonia. Which of the following antibacterial drugs can be applied in this clinical situation?

- A. Amoxicillin
- **B.** Tetracycline
- C. Biseptol
- **D.** Rifampicin
- E. Vancomycin

A man with a long history of chronic hepatitis has been diagnosed with pneumonia. Which of the following antibacterial drugs can be applied in this clinical situation?

- A. Amoxicillin
- **B.** Tetracycline
- C. Biseptol
- **D.** Rifampicin
- E. Vancomycin

## **Clinical Pharmacy in Haematology**

A 36-year-old patient complains of general weakness, somnolence, increased brittleness of nails, loss of hair. The patient was diagnosed with iron-deficiency anemia. What drug should be prescribed for treatment?

- A. Ferricsulfate
- B. Cyanocobalamin
- C. Folic acid
- D. Myelosanum (Busulfan)
- E. Riboxin (Inosine)

A patient who has been suffering from gastric diseases for a long time is found to have hyperchromic anemia. Which of the following drugs is applied for this pathology treatment?

- A. Cyanocobalamine
- **B.** Ascorbic acid
- C. Unitiol
- **D.** Ferrum Lek
- E. Oxyferriscorbone

To treat iron-deficiency anemia the following	
drug is usually prescribed:	
A. Ferroplex	
B. Furagin (Furazidinum)	
C. Corticosteroids	
D. Heparin	
E. Vicasol (Menadione)	

# **Clinical Pharmacy in Nephrology**

A 25-year-old man is diagnosed with	What is the drug of choice for the
acute pyelonephritis of moderate severity.	treatment of acute pyelonephritis in a
What drugs should be prescribed for	pregnant woman in the I trimester?
etiotropic therapy?	A. Amoxicillin
A. Antimicrobial agents	<b>B.</b> Norfloxacin
B. Glucocorticoids	C. Biseptolum
C. Nonsteroidal antiinflammatory	<b>D.</b> Gentamicin
drugs	E. Chloramphenicol
D. Anticholinesterase drugs	
E. Antiarrhythmic drugs	
A 12 weeks pregnant patient has been	A female patient in the first trimester of
hospitalized with symptoms of acute	pregnancy has been diagnosed with
cystitis. What antibiotic can be	acute pyelonephritis. What is the
recommended in this case?	antibiotic drug of choice for treating
A. Amoxicillin	this patient?
<b>B.</b> Ciprofloxacin	A. Amoxicillin
C. Gentamicin	<b>B.</b> Norfloxacin
<b>D.</b> Metronidazole	C. Gentamicin
E. Tetracycline	<b>D.</b> Chloramphenicol
	E. Amikacin
Exacerbation of urolithiasis has caused a	A 43-year-old patient was delivered to an
renal colic in the patient. What drug must	admission room with renal colic attack. What
be administered to arrest the colic?	group of drugs would be the most efficient
A. Drotaverine hydrochloride	during the attack?
<b>B.</b> Siliborum	A. Antispasmodics
C. Almagel	B. Hepatoprotectors
<b>D.</b> Aethimizolum	C. Antacids
E. Neostigmine methylsulfate	D. Antibiotics
	E. Cholagogues
Which of the following diuretics	1 0
SHOULD NOT be administered to	
patients with impaired hearing?	the listed below:
A. Furosemide	A. Furosemide
<b>B.</b> Spironolactone	<b>B.</b> Clopamide
C. Clopamide	C. Acetazolamide
<b>D.</b> Indapamide	<b>D.</b> Spironolactone
E. Chlorthalidone	E. Triamterene

## **Clinical Pharmacy in Endocrinology**

A 15-year-old patient has been first diagnosed with type I diabetes mellitus. Which antihyperglycemic drug should be administered in this case?

- A. Insulin
- B. Metformin
- C. Diabetone
- **D.** Glurenorm
- E. Glibenclamide

A 17-year-old patient complains of persistent thirst, dry mouth, frequent urination, increased appetite. Blood glucose is at the rate of 11 mmol/l. The patient has been diagnosed with diabetes mellitus type I. What drug is indicated for treatment?

- A. Insulin
- **B.** Maninil
- C. Glibenclamide
- D. Acarbose
- E. Asparcamum

Help the doctor to select a drug for the replacement therapy after the thyroid gland removal:

- A. L-thyroxine
- **B.** Insulin
- C. Prednisolone
- D. Parathyroidin
- E. Mercazolilum

A 48-year-old patient has undergone incomplete amputation of the thyroid gland. Choose the drug for replacement therapy in case of hypothyroidism:

- A. L-thyroxin
- **B.** Hydrocortisone
- C. Insulin
- **D.** Metoprolol
- E. Prednisolone

Which of the listed antibacterial drugs **should NOT be administered** to a patient with diabetes mellitus type II being treated with glibenclamid?

- A. Co-trimoxazolum
- **B.** Midecamycin
- C. Gentamycinum
- **D.** Benzylpenicillinum
- E. Doxycycline

A female 49-year-old patient complains of compressing headache in the occipital region, dizziness, increased AP. The patient has a history of diabetes mellitus type II. What diuretic DOES NOT affect the blood glucose level?

- A. Indapamide
- **B.** Furosemide
- C. Hypothiazide
- D. Ethacrynic acid
- E. Urea

## **Clinical Pharmacy in Allergology**

A patient had been given an injection of 0,25% novocaine solution for the purpose of anaesthetization. Suddenly the patient developed red spots, intense sweating, tachycardia, bronchospasm, edema of nasal mucosa. What is the cause of this complication?

- A. Immediate allergy
- **B.** Delayed allergy
- C. Local irritation
- D. Tachyphylaxis
- **E.** Withdrawal syndrome (Abstinence syndrome)

A patient after bee's stings has angioedema (Quincke's edema). Which drug should be immediately inject to eliminate this condition?

- A. Epinephrine hydrochloride
- **B.** Sodium chloride
- C. Platyphyllini hydrotartras
- **D.** Atropine sulfate
- E. Anaprilinum

A patient is 20 years old. After she was stung by a bee the patient developed Quincke's disease; rash in the form of blisters and papulae appeared on her torso. First aid in this case should start with administering the following drug:

- A. Prednisolone
- **B.** Penicillin
- C. Fresh frozen plasma
- **D.** Rheopolyglukin (Dextran)
- E. Haemodes

A bus driver addressed a pharmacy due to his suffering from allergic rhinitis. What antihistamine with minimal sedative action can you recommend?

- A. Loratadine
- **B.** Clemastine
- C. Astemizole
- **D.** Diphenhydramine
- E. Chloropyramine

A patient with atopic dermatitis presented to the hospital. Which drug with anti-inflammatory and antiallergic effect should be administered to this patient?

- A. Prednisolone
- **B.** Aethamidum
- C. Oxytocin
- **D.** Insulin
- E. Retabolilum

## **Pharmaceutical Care**

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A 60-year-old man has come to a pharmacy	A 25-year-old patient with frequent
with complaints of impaired twilight vision,	migraine attacks has been
dry sclera, cracked and peeling skin. The	prescribed sumatriptan. Specify the
dispensing chemist suspected hypovitaminosis	mechanism of its action:
and recommended the customer to take the	A. Selective agonist of 5–HT <sub>1</sub> -
following drug after consultation with the	serotonin receptors
physician:	<b>B.</b> Selective antagonist of $5-HT_1$ -
A. Retinol acetate	serotonin receptors
<b>B.</b> Tocopherol acetate	C. Nonselective ß-blocker
C. Ergocalciferol	<b>D.</b> Stimulator of ß-adrenergic
<b>D.</b> Vicasol (Menadione)	receptors
<b>E.</b> Ascorbic acid	E. Selective ß-blocker
A 36-year-old woman with herpetic rash on	A 35-year-old female customer came
her lips has come to a pharmacy. Recommend	to a pharmacy to purchase a medicine
her a drug for topical treatment:	for the prevention of influenza. Which
A. Acyclovir	of the following drugs can be
<b>B.</b> Fluconazole	recommended?
C. Levofloxacin	A. Rimantadine
<b>D.</b> Metronidazole	<b>B.</b> Acyclovir
E. Amikacin	C. Ribavirin
	<b>D.</b> Ganciclovir
	E. Lamivudine
What is the most suitable drug that can	A patient with arterial hypertension was
be recommended for the treatment of	administered a non-prescription drug for
rhinitis accompanying an ARVI in a 7-	symptomatic treatment of rhinitis. What
month-old child?	pharmaceutical form should be
A. 0,9% warm water solution of	recommended the patient in order to reduce
NaCl	as much as possible the likelihood of
<b>B.</b> Naphthyzin	development of undesirable systemic
C. Galazolin	vasoconstriction?
<b>D.</b> Pinosol	A. Ointment
<b>E.</b> Boromentol ointment	<b>B.</b> Gel
	C. Drops
	<b>D.</b> Aerosol
	E. Tablets
A young mother has come to a pharmacy to	A woman asked a pharmaceutist to
buy an antipyretic drug for her 3-month-old	dispense an antipyretic for an 8-
infant. What dosage form would you choose	month-old child. Which drug
for the infant?	should be recommended?
A. Suppositories	A. Paracetamol
<b>B.</b> Tablets	<b>B.</b> Acetylsalicylic acid
C. Capsules	C. Indomethacin
<b>D.</b> Spray	<b>D.</b> Diclofenac sodium
E I amaza	E Diversione

**E.**Piroxicam

What drug can be recommended for

E. Lozenges

Mother of a 2-month-old child came to a

pharmacy and asked for a febrifuge. What drug should be recommended for the child?

- A. Paracetamolum
- **B.** Nimesulide
- C. Acetylsalicylic acid
- **D.** Indometacinum
- E. Diclofenac sodium

A 3-year-old child is intolerant to paracetamol. What antipyretic drug can be taken instead?

- A. Ibuprofen
- **B.** Acetylsalicylic acid
- C. Nimesulide
- **D.** Naproxen
- E. Diclofenac sodium

symptomatic treatment of muscle pain in a 5-year-old child?

- A. Paracetamol
- **B.** Acetylsalicylic acid
- C. Diclofenac sodium
- **D.** Indomethacin
- E. Celecoxib

A 26-year-old pregnant woman (III trimester of pregnancy) complains about body temperature rise up to 39oC. What febrifuge may be recommended in this case?

- A. Paracetamol
- **B.** Aspirin
- C. Diclofenac
- D. Analgin
- E. Indometacin

A woman in the III trimester of pregnancy has an acute respiratory viral disease accompanied with body temperature rise up to 39°C. Which of the drugs should be recommended?

- A. Paracetamol
- **B.** Celecoxib
- C. Indomethacin
- **D.** Acetylsalicylic acid
- E. Diclofenac sodium

Reye syndrome (encephalopathy, fatty degeneration of liver) develops as a side effect in children suffering from fever of viral origin when they take the following medicine:

- A. Acetylsalicylic acid
- B. Celecoxib
- C. Ibuprofen
- D. Metamizole sodium
- E. Paracetamol

A 32-year-old woman that had been undergoing antibiotic therapy for her pneumonia has developed intestine disbacteriosis. What drugs should she be prescribed?

#### A. Probiotics

- B. Immune-response modulating agents
- C. Choleretics
- D. Antacids
- E. Antispasmodics

Specify the drugs recommended for prevention and correction of dysbiotic problems caused by antibiotic therapy:

- A. Probiotics
- **B.** Antacids
- C. Prokinetics
- **D.** Uroseptics
- E. Choleretics

A 74-year-old man came to the pharmacy. He had been prescribed ampicillin for antibiotic treatment of dysenteric gastroenterocolitis. What group of drugs should be recommended for dysbiosis prevention in this case?

- A. Probiotics
- B. Antacids
- C. Enzymatic agents
- D. Sorbents
- E. Immunosuppressants

A 25-year-old female patient had been taking antibiotics for 7 days, the disease was complicated by the development of intestinal dysbiosis. This complication should be treated by the drugs of the following group:

- A. Probiotics
- **B.** Antispasmodics
- C. Choleretics
- **D.** Antacids

	E. Adaptogens
A 54-year-old patient who has been	A 28-year-old woman came to a pharmacy
suffering from hyperacidic gastritis for	complaining of constipation that developed
several years was prescribed almagel.	after antacid treatment. What drug could be
What pharmacotherapeutical	the cause of this symptom?
complications on the part of digestive	A. Aluminium-containing drugs
organs may be expected in the first	<b>B.</b> Magnesium-containing drugs
place?	C. Calcium carbonate
A. Constipation	<b>D.</b> Simethicone
<b>B.</b> Nausea	E. Ranitidine
C. Anorexia	
<b>D.</b> Emesis	
E. Diarrhea	
What antacid can cause constipations,	Which preparation from the group of
osteoporosis, and encephalopathy when taken	laxative agents <b>IS NOT</b> to be administered
for a long period of time?	in case of intoxication with CNS-inhibiting
A. Aluminium hydroxide	substances?
B. Sodium bicarbonate	A. Magnesium sulfate
C. Calcium carbonate	<b>B.</b> Sodium sulfate
D. Sodium alginate	C. Vaseline oil
E. Magnesium oxide	<b>D.</b> Bisacodyl
	E. Guttalax