

Науковий твір «PHARMACOLOGY: ONE-ANSWER TESTS (COMMON PRACTICE)»; Важнича О.М., Дев'яткіна Т.О., Дев'яткіна Н.М.

Module 1. Lesson 1. Low of Ukraine “About medicinal drugs.” The introduction into general prescription. Non-liquid dosed medicinal forms. Soft dosed medicinal forms. Liquid dosed medicinal forms. Medicinal forms for injections

Liquid dosed medicinal forms are

Both drops for taking inside and solutions for taking inside

Eye drops

Liniments

Drops for taking inside

Solutions for taking inside

Liquid forms from medicinal plants are all, except:

Ointments

Infusions

Decoctions

Tinctures

Liquid extracts

Solutions for internal use are prescribed overage on:

12 administrations

5 administrations

20 administrations

1 administration

None of listed

Drops for internal use are prescribed overage on:

20 - 30 administrations

12 administrations

5 - 10 administrations

1 administration

None of listed

Doses of liquids in prescriptions are indicated in:

Milliliters

Grams

Milligrams

Kilograms

Liters

Main rules of prescribing are:

All listed

In Latin

By ink or ball pen

Without corrections

With physician's signature and stamp

Doses of dry substances in prescriptions are indicated in:

Grams

Milligrams

Kilograms
Milliliters
Liters

Main rules of prescribing of toxic and narcotic drugs are:

Form 3; physician's signature and stamp; signature of the head of the clinic and stamp of the hospital

Form 1; physician's signature and stamp at the end of prescription

Form 2; physician's signature and stamp at the end of prescription

Form 3; physician's signature and stamp at the end of prescription

Form 3; physician's signature and stamp of the hospital at the end of prescription

Parts of prescription which are written in Latin:

Designation of materials and subscription

Inscription

Subscription

Signature

Designation of materials

Parts of prescription which are written in the state language:

Both inscription and signature

Inscription

Subscription

Signature

Designation of materials

Drops for internal use belong to:

Liquid dosed medicinal forms

Non-liquid dosed medicinal forms

Sterile medicinal forms

Soft dosed medicinal forms

Non-dosed medicinal forms

Tinctures for internal use belong to:

Liquid dosed medicinal forms

Non-liquid dosed medicinal forms

Sterile medicinal forms

Soft dosed medicinal forms

Non-dosed medicinal forms

Infusions and decoctions for internal use are:

Liquid dosed medicinal forms

Non-liquid dosed medicinal forms

Medicinal forms for injections

Soft dosed medicinal forms

Non-dosed medicinal form.

Infusions and decoctions for internal use are:

Water extracts from medicinal plants

Solutions of non-organic substances

Alcohol extracts from medicinal plants

Oil solutions of organic matters

Mixtures of medicinal forms

Solutions for adult patients are dosed by:

Tablespoons

Teaspoons

Dessert spoons

Ampoules

Flacons

Liquid dosed medicinal forms from medicinal plants include:

Tinctures and liquid extracts

Powders and capsules

Tablets and dragee

Pastes and ointments

Solutions and drops

Solvent in solutions for internal use is:

Distilled water

Oleum Vaselinei

Vaselinum

Glycerinum

None of listed

1 tablespoon of water solution contains:

15 milliliters

15 drops

0.15 milliliters

150 milliliters

15 grams

1 milliliter of water solution contains:

20 drops

2 drops

40 drops

20 milligrams

40 milligrams

False statement is:

Tinctures are prescribed in the full form

Liquid extracts are prescribed in the short form

Solutions for internal use are prescribed by the method of total dose

Neo-galenic preparations are forms of industrial manufacture

Mixture can have commercial name

False statement is:

Liquid extracts are prescribed in the full form

Tinctures are prescribed in the short form

Drops for internal use are prescribed by the method of total dose

Liquid extracts are prescribed in the short form

Mixtures are prescribed in the full form

Non-liquid dosed medicinal forms are:

Tablets, capsules, and powders for internal use

Tablets

Capsules

Powders for internal use

Powders for external use

Medicinal forms for injections should be:

Sterile, homogenic and apyrogenic at the same time

Sterile

Homogenic

Apyrogenic

Isotonic

Weight margins for dosed powders are:

0.1-1.0

0.01-0.1

0.1-0.5

1.0 – 5.0

1.0 – 10.0.

Capsules contain:

Powders

Ointments

Liniments

Aspersions

Water solutions.

Tablets belong to:

Non-liquid dosed medicinal forms

Liquid dosed medicinal forms

Sterile medicinal forms

Soft dosed medicinal forms

Non-dosed medicinal forms.

Dragee belong to:

Non-liquid dosed medicinal forms

Liquid dosed medicinal forms

Sterile medicinal forms

Soft dosed medicinal forms

Non-dosed medicinal forms.

Ampoules are:

Medicinal forms for injections

Non-liquid dosed medicinal forms

Liquid dosed medicinal forms

Soft dosed medicinal forms

Non-dosed medicinal forms.

Rectal suppositories are:

Soft dosed medicinal forms

Non-liquid dosed medicinal forms

Liquid dosed medicinal forms

Sterile medicinal forms
Non-dosed medicinal forms.

Ampoule can contain:
All listed
Water solution
Oil solution
Liquid
Dry substance.

Medicinal forms for injections include:
Ampoules and flacons
Powders and capsules
Tablets and dragee
Pastes and ointments
Tinctures and extracts.

Form making substance for suppositories is:
Oleum Cacao
Oleum Vaselini
Vaselinum
Glycerinum
None of listed

Average dose of Oleum Cacao in the rectal suppository is:
3.0
4.0
3 milliliters
4 milliliters
0.3.

Average dose of Oleum Cacao in the vaginal suppository is:
4.0
3.0
0.4
4 milliliters
40.0.

False statement is:
Tablets are prescribed in the full form
Tablets are prescribed in the short form
Tablets are prescribed by the method of single dose
Tablets are the form of industrial manufacture
Tablets can have commercial name.

False statement is:
Ampoules are prescribed in the full form
Ampoules are prescribed in the short form
Ampoules are prescribed by the method of single dose
Ampoules are the form of industrial manufacture
Ampoules contain sterile substances.

Magistral solutions for injections are prescribed with the term:

Sterilisetur!

Cito!

Citissimo!

Pro auctore

None of listed.

If the weight of the dosed powder is less than 0.1, it is necessary to add:

Sacharum 0.2

Oleum Cacao 3.0

Oleum Cacao 4.0

Aqua destilata q.s.

Talcum q.s.

If in the prescription two medicinal substances are in the same dose, it is necessary to use a term:

Ana

Quantum satis

Sterilizetur

Adde aseptic

None of listed.

Drops for internal use are:

Solutions of drastic remedies

Solutions of weak remedies

Aqueous extracts from medicinal plants

Alcohol extracts from medicinal plants

None of mentioned above.

Glossette is:

A small tablet for sublingual use

A large tablet for dissolving

A tablet for oral administration

A tablet for external use

A shell for powders.

Spansules are:

All listed

Kind of capsules

Taken orally

Containing microdragee

Prescribed similar to capsules.

Module 1. Lesson 2. Non-dosed medicinal forms

Doses of liquids in prescriptions are indicated in:

Milliliters

Grams

Milligrams

Kilograms

Liters.

Main rules of prescribing are:

All listed

In Latin

By ink or ball pen

Without corrections

With physician's signature and stamp.

Doses of dry substances in prescriptions are indicated in:

Grams

Milligrams

Kilograms

Milliliters

Liters.

Solid non-dosed medicinal form is only:

Aspersions

Capsules

Ampoules

Ointments

Eye drops.

Soft non-dosed medicinal forms are all, except:

Ampoules

Liniments

Pastes

Ointments

Gels.

Pastes are:

Dense ointments

Liquid ointments

Very fine powders

Water extractions from medicinal plants

Alcohol extractions from medicinal plants.

Liniments are:

Liquid ointments

Dense ointments

Very fine powders

Forms for injections

Forms for internal use.

Aspersion always contains:

Medicinal and inert substances

Medicinal substances

Inert substances

Solvent

Ointment base.

Contents of dry substances in the paste should be:

25% - 65%

Less than 25%

More than 25%
65% - 100%
None of listed.

Constituents in the ointment may be represented by all, except:

Glycerinum
Lanolinum
Vaselinum
Adeps suillus depuratus
Ceresinum.

Parts of prescription which are written in Latin:

Designation of materials and subscription
Inscription
Subscription
Signature
Designation of materials.

Parts of prescription which are written in the state language:

Both inscription and signature
Inscription
Subscription
Signature
Designation of materials.

Eye drops belong to:

Liquid non-dosed medicinal forms
Non-liquid dosed medicinal forms
Sterile dosed medicinal forms
Soft non-dosed medicinal forms
Liquid dosed medicinal forms.

Solutions for external use belong to:

Liquid non-dosed medicinal forms
Non-liquid dosed medicinal forms
Sterile dosed medicinal forms
Soft non-dosed medicinal forms
Liquid dosed medicinal forms.

Infusions and decoctions for external use are:

Liquid non-dosed medicinal forms
Non-liquid dosed medicinal forms
Sterile dosed medicinal forms
Soft non-dosed medicinal forms
Liquid dosed medicinal forms.

Infusions and decoctions for external use are:

Water extracts from medicinal plants
Solutions of non-organic substances
Alcohol extracts from medicinal plants
Oil solutions of organic matters
Mixtures of medicinal forms.

Solutions for external use can be used:

All listed

For treatment of wounds

For treatment of eye diseases

For treatment of dental diseases

For disinfection.

Liquid non-dosed medicinal form, which should be sterile, is:

Eye drops

Ear drops

Nasal drops

Aspersions

Ointment.

Form making substance in the ointments is:

Vaseline

Distilled water

Oleum Vaselini

Glycerinum

Talcum.

Amount of alcohol solution always must be:

Less than 100 milliliters

More than 100 milliliters

No more than 10 milliliters

No more than 1 milliliters

Strongly limited.

Aspersions are:

Very fine powder

Powder from medicinal plant

Mixture of powders

Hydrophilic ointment

Lipophilic ointment.

False statement is:

Ointments are prescribed only in the full form

Ointments are prescribed in amount from 5.0 to 100.0

Ointments contain Vaseline as form-making substance

Ointments are combined and simple

Ointments belong to soft non-dosed medicinal forms.

Ointments should be prescribed with the sentence:

Misce ut fiat unguentum

Misce

Misce ut fiat pulvis

Misce ut fiat suppositorium rectale

Misce ut fiat suppositorium vaginale.

Correct information about the amount of eye drops is:

10 milliliters

180 milliliters
10 grams
10 ampoules
10 capsules.

Correct designation of materials in the prescription on oil 5% solution of Anaesthesinum for treatment of skin rash is:

Solutionis Anaesthesini oleosae 5%-50 ml
Solutionis Anaesthesini oleosae 50 ml
Sol. Anaesthesini 5%-50.0
Oil Solutionis Anaesthesini 5%-50 ml
Solutionis "Anaesthesinum" 50 ml

Correct designation of materials in the prescription on 10,0 of 1% ointment of Prednisolonum is:

Unguenti Prednisoloni 1% - 10,0
Solutionis Prednisoloni 1% - 10,0
Unguenti Prednisoloni 1% - 10 ml
Aspersio Prednisoloni 1% - 10,0
Unguenti Prednisoloni 10,0

Which prescription on eye drops of Atropini sulfas (1% -10 ml) is correct?

Recipe: Solutionis Atropini sulfatis 1% - 10 ml. Sterilisetur! Da. Signa. Eye drops.
Recipe: Solutionis Atropini sulfas 1% - 10 ml. Da. Signa. Eye drops.
Recipe: Drops Atropini sulfatis 10 ml. Sterilisetur! Da. Signa. Eye drops.
Recipe: Sol. Atropini sulfatisi 1% - 10 ml. Sterilisetur! Da tales doses numero 10. Signa. Eye drops.
Recipe: Atropini sulfas 1% - 10 ml. Da. Signa. Eye drops.

Which prescription on the ointment with commercial name Locacorten is correct?

Recipe: Unguenti Locacorteni 15,0. Da. Signa. Apply on the skin.
Recipe: Unguenti. Locacortenum 15,0. Da. Signa. Apply on the skin.
Recipe: Unguenti Locacorteni 15,0. Sterilisetur! Da. Signa. Apply on the skin.
Recipe: Unguenti. Locacorteni 15,0. Da tales doses numero 10. Signa. Apply on the skin.
Recipe: Locacorteni 15.0. Da in unguentum. Signa. Apply on the skin.

Which prescription on the liniment is correct?

Recipe: Linimenti Syntomycini 10% - 30.0. Da. Signa. Apply on the wound.
Recipe: Linimenti Syntomycini 10% - 30.0. Apply on the wound.
Recipe: Linimenti Syntomycini 10% - 30.0. Sterilisetur! Da. Signa. Apply on the wound.
Recipe: Linimenti Syntomycini 10% - 30.0. Da tales doses numero 10. Signa. Apply on the wound.
Recipe: Syntomycini 10% - 30.0. Da in linimentum. Signa. Apply on the wound.

Inert substance used in aspersions is:

Talcum
Vaselinum
Oleum Vaselini
Oleum Persicorum
Aqua destillata.

Total amount of water solution for external use depends on:

The goal of use

Stability
Ionization
Activity
Toxicity.

Ointment is prescribed in the full form, if:

It is combined
It is simple
It is officinal
It is eye ointment
It has commercial name.

Paste is prescribed in the short form, if:

It is officinal
It is magistral
It contains few medicinal substances
It contains additional dry substances
It contains natural ointment base.

Solvent in the alcohol solutions:

Ethyl alcohol
Distilled water
Vaseline oil
Glycerin
Cacao oil.

Ointment bases for the liniments are:

Liquid oils
Solid butters
Ethyl alcohol
Distilled water
Liquid extracts.

A plaster (Emplastrum) is:

All listed
A soft medicinal form
Plastic mass softening at body temperature
Plastic mass adhering tightly to the skin
Including skin glues.

Non-dosed form of ointment-like or liquid) consistency intended for application to the skin for treatment of injuries or for the destruction of parasites is named:

Application
Plaster
Paste
Liniment
Suspension.

Officinal ointments are prescribed:

In the short form
In the full form
By the method of single dose

By the method of total dose
All is false.

Mixtures for external may contain:
All listed
Decoction or infusion
Distilled water
Tincture or liquid extract
Dry substances.

Combined aspersion should be prescribed with a sentence:
Misce ut fiat pulvis subtilissimus
Micse
Misce ut fiat pulvis
Misce ut fiat powder
Misce ut fiat very fine powder.

Module 1. Lesson 3. Final control on the unit “General prescription”

Liquid dosed medicinal forms are:
Both drops and solutions for taking inside
Eye drops
Liniments
Drops for taking inside
Solutions for taking inside.

Liquid forms from medicinal plants are all, except:
Ointments
Infusions
Decoctions
Tinctures
Liquid extracts.

Solutions for internal use are prescribed overage on:
12 administrations
5 administrations
20 administrations
1 administration
None of listed.

Drops for internal use are prescribed overage on:
20 - 30 administrations
12 administrations
5 - 10 administrations
1 administration
None of listed.

Doses of liquids in prescriptions are indicated in:
Milliliters
Grams
Milligrams

Kilograms

Liters.

Main rules of prescribing are:

All listed

In Latin

By ink or ball pen

Without corrections

With physician's signature and stamp.

Doses of dry substances in prescriptions are indicated in:

Grams

Milligrams

Kilograms

Milliliters

Liters.

Main rules of prescribing of poisonings and narcotic drugs are:

Form 3; physician's signature and stamp at the end of prescription; signature of the head of the clinic and stamp of the hospital

Form 1; physician's signature and stamp at the end of prescription

Form 2; physician's signature and stamp at the end of prescription

Form 3; physician's signature and stamp at the end of prescription

Form 3; physician's signature and stamp of the hospital at the end of prescription.

Parts of prescription which are written in Latin:

Designation of materials and subscription

Inscription

Subscription

Signature

Designation of materials.

Parts of prescription which are written in the state language:

Both inscription and signature

Inscription

Subscription

Signature

Designation of materials.

Drops for internal use belong to:

Liquid dosed medicinal forms

Non-liquid dosed medicinal forms

Sterile medicinal forms

Soft dosed medicinal forms

Non-dosed medicinal forms.

Tinctures for internal use belong to:

Liquid dosed medicinal forms

Non-liquid dosed medicinal forms

Sterile medicinal forms

Soft dosed medicinal forms

Non-dosed medicinal forms.

Infusions and decoctions for internal use are:

Liquid dosed medicinal forms

Non-liquid dosed medicinal forms

Medicinal forms for injections

Soft dosed medicinal forms

Non-dosed medicinal forms.

Infusions and decoctions for internal use are:

Water extracts from medicinal plants

Solutions of non-organic substances

Alcohol extracts from medicinal plants

Oil solutions of organic matters

Mixtures of medicinal forms.

Solutions for adult patients are dosed by:

Tablespoons

Teaspoons

Dessert spoons

Ampoules

Flacons.

Liquid dosed medicinal forms from medicinal plants include:

Tinctures and liquid extracts

Powders and capsules

Tablets and dragee

Pastes and ointments

Solutions and drops.

Solvent in solutions for internal use is:

Distilled water

Oleum Vaselini

Vaselinum

Glycerinum

None of listed.

1 tablespoon of water solution contains:

15 milliliters

15 drops

0.15 milliliters

150 milliliters

15 grams.

1 milliliters of water solution contains:

20 drops

2 drops

40 drops

20 milligrams

40 milligrams.

False statement is:

Tinctures are prescribed in the full form

Liquid extracts are prescribed in the short form
Solutions for internal use are prescribed by the method of total dose
Neo-galenic preparations are forms of industrial manufacture
Mixture can have commercial name.

Non-liquid dosed medicinal forms are:
Tablets, capsules, and powders for internal use
Tablets
Capsules
Powders for internal use
Powders for external use.

Medicinal forms for injections should be:
Sterile, homogenic and apyrogenic
Sterile
Homogenic
Apyrogenic
Isotonic.

Weight margins for dosed powders are
0.1-1.0
0.01-0.1
0.1-0.5
1.0 – 5.0
1.0 - 10.0.

Capsules contain:
Powders
Ointments
Liniments
Aspersions
Water solutions.

Tablets belong to:
Non-liquid dosed medicinal forms
Liquid dosed medicinal forms
Sterile medicinal forms
Soft dosed medicinal forms
Non-dosed medicinal forms.

Dragee belong to:
Non-liquid dosed medicinal forms
Liquid dosed medicinal forms
Sterile medicinal forms
Soft dosed medicinal forms
Non-dosed medicinal forms.

Ampoules are:
Medicinal forms for injections
Non-liquid dosed medicinal forms
Liquid dosed medicinal forms
Soft dosed medicinal forms

Non-dosed medicinal forms.

Rectal suppositories are:

Soft dosed medicinal forms

Non-liquid dosed medicinal forms

Liquid dosed medicinal forms

Sterile medicinal forms

Non-dosed medicinal forms.

Ampoule can contain:

All listed

Water solution

Oil solution

Liquid

Dry substance.

Medicinal forms for injections include:

Ampoules and flacons

Powders and capsules

Tablets and dragee

Pastes and ointments

Tinctures and extracts.

Form making substance for suppositories is:

Oleum Cacao

Oleum Vaselini

Vaselinum

Glycerinum

None of listed

Average dose of Oleum Cacao in the rectal suppository is:

3.0

4.0

3 milliliters

4 milliliters

0.3.

Average dose of Oleum Cacao in the vaginal suppository is:

4.0

3.0

0.4

4 milliliters

40.0.

False statement is:

Tablets are prescribed in the full form

Tablets are prescribed in the short form

Tablets are prescribed by the method of single dose

Tablets are the form of industrial manufacture

Tablets can have commercial name.

False statement is:

Ampoules are prescribed in the full form
Ampoules are prescribed in the short form
Ampoules are prescribed by the method of single dose
Ampoules are the form of industrial manufacture
Ampoules contain sterile substances.

Magistral solutions for injections are prescribed with the term:

Sterilisetur!

Cito!

Citissimo!

Pro auctore

None of listed.

Solid non-dosed medicinal form is only:

Aspersions

Capsules

Ampoules

Ointments

Eye drops.

Soft non-dosed medicinal forms are all, except:

Ampoules

Liniments

Pastes

Ointments

Gels.

Pastes are:

Dense ointments

Liquid ointments

Very fine powders

Water extractions from medicinal plants

Alcohol extractions from medicinal plants.

Liniments are:

Liquid ointments

Dense ointments

Very fine powders

Forms for injections

Forms for internal use.

Aspersion always contains:

Medicinal and inert substances

Medicinal substances

Inert substances

Solvent

Ointment base.

Contents of dry substances in the paste should be:

25% - 65%

Less than 25%

More than 25%

65% - 100%
None of listed.

Constituents in the ointment may be represented by all, except:

Glycerinum
Lanolinum
Vaselinum
Adeps suillus depuratus
Ceresinum.

Eye drops belong to:

Liquid non-dosed medicinal forms
Non-liquid dosed medicinal forms
Sterile dosed medicinal forms
Soft non-dosed medicinal forms
Liquid dosed medicinal forms.

Solutions for external use belong to:

Liquid non-dosed medicinal forms
Non-liquid dosed medicinal forms
Sterile dosed medicinal forms
Soft non-dosed medicinal forms
Liquid dosed medicinal forms.

Infusions and decoctions for external use are:

Liquid non-dosed medicinal forms
Non-liquid dosed medicinal forms
Sterile dosed medicinal forms
Soft non-dosed medicinal forms
Liquid dosed medicinal forms.

Infusions and decoctions for external use are:

Water extracts from medicinal plants
Solutions of non-organic substances
Alcohol extracts from medicinal plants
Oil solutions of organic matters
Mixtures of medicinal forms.

Solutions for external use can be used:

All listed
For treatment of wounds
For treatment of eye diseases
For treatment of dental diseases
For disinfection.

Liquid non-dosed medicinal form, which should be sterile, is:

Eye drops
Ear drops
Nasal drops
Aspersions
Ointment.

Form making substance in the ointments is:

Vaselineum
Distilled water
Oleum Vaselini
Glycerinum
Talcum.

Amount of alcohol solution always must be:

Less than 100 milliliters
More than 100 milliliters
No more than 10 milliliters
No more than 1 milliliters
Strongly limited.

Aspersion is:

Very fine powder
Powder from medicinal plant
Mixture of powders
Hydrophilic ointment
Lipophilic ointment.

False statement is:

Ointments are prescribed only in the full form
Ointments are prescribed in amount from 5,0 to 100,0
Ointments contain Vaselineum as form-making substance
Ointments are combined and simple
Ointments belong to soft non-dosed medicinal forms.

Correct information about the amount of eye drops is:

10 milliliters
180 milliliters
10 grams
10 ampoules
10 capsules.

Inert substance, used in aspersions:

Talcum
Vaselineum
Oleum Vaselini
Oleum Persicorum
Distilled water.

Total amount of water solution for external use depends on:

The goal of use
Stability
Ionization
Activity
Toxicity.

Ointment is prescribed in the full form, if it is:

Combined
Simple

Officinal
Eye ointment
With commercial name.

Paste is prescribed in the short form, if:
It is officinal
It is magistral
It contains few medicinal substances
It contains additional dry substances
it contains natural ointment base.

Solvent in the alcohol solutions:
Ethyl alcohol
Distilled water
Vaseline oil
Glycerin
Cacao oil.

Ointment bases for the liniments are:
Liquid oils
Solid butters
Ethyl alcohol
Distilled water
Liquid extracts.

Drops for internal use are:
Solutions of drastic remedies
Solutions of weak remedies
Aqueous extracts from medicinal plants
Alcohol extracts from medicinal plants
None of mentioned above.

Glossette is:
A small tablet for sublingual use
A large tablet for dissolving
A tablet for oral administration
A tablet for external use
A shell for powders.

Kind of capsules containing of microdragee is named:
Spansules:
Granules
Cachets
Caramels
Lorenge.

All about a plaster (Emplastrum) is correct, except:
It is officinal dosed medicinal form
It is non-dosed soft medicinal form
It is plastic mass softening at body temperature
It is plastic mass adhering tightly to the skin
It is including skin glues.

Non-dosed form of ointment-like or liquid consistency intended for application to the skin is:

Application

Aspersion

Aerosol

Liniment

Lemonade.

Module 1. Lesson 4. The introduction into pharmacology. History of pharmacology. Pharmacokinetics of medicinal drugs. Pharmacodynamics of medicinal drugs. Principles of medicinal drugs classification

Absorption is:

Drug's penetration from the site of administration into the blood

Drug's penetration from the blood into tissues

Chemical transformation of the drug

Drugs interaction

Binding to plasma proteins.

The main reactions of biotransformation stage I are:

Microsomal oxidation

Glycolysis

Conjugation

Hydrolysis

Lipid peroxidation.

Drugs are transported in connection with:

Albumens

Nucleic acids

Phospholipids

Salts ions

All listed.

Drug excretion is:

Taking out of the drug

Metabolism of the drug in the body

Penetration of the drug into the blood from the site of its administration

Penetration through tissue barriers

Inactivation of the drug.

Drug elimination includes:

Biotransformation and excretion

Absorption and distribution

Transport and biotransformation

Penetration through tissue barriers

Distribution and biotransformation.

Main mechanisms of renal excretion are:

Filtration and tubule reabsorption

Microsomal oxidation

Passive diffusion

Filtration through pores
All listed.

Main mechanisms of drugs crossing through cell membrane are:
All listed
Active transport
Endocytosis
Passive diffusion
Filtration through pores.

Routes of administration suitable for emergency help are all, except:
Oral
Sublingual
By inhalation
By injection
Rectal.

Drugs administered by injections:
Must be sterile
Have slow onset of action
Are not suitable for emergency help
Do not need special equipment
Are not accompanied by trauma and pain.

Drugs administered orally:
Have slow onset of action
Must be sterile
Are suitable for emergency help
Need special equipment
Accompanied by trauma of skin and pain.

Sublingual administration is characterized by:
Rapid onset of action without first-pass metabolism
Slow onset of action
Absorption of the drug in the stomach
Intensive first-pass metabolism in the liver
Trauma of skin and pain.

All, concerning doses of drugs, is correct, except:
Supporting dose is high dose at the start of treatment
Single dose is the dose for one administration
Therapeutic dose may be minimal, average, and maximal
LD-50 causes the death of 50% of animals in the experiments
Toxic dose is the amount of drug causing poisoning.

Local action is:
Action in the site of administration
Action after absorption into the blood
Action by reflexes
Short-durative action
Irreversible action.

Resorptive action is:

Action after absorption into the blood

Action in the site of administration

Action by reflexes

Reversible action

Irreversible action.

Tachyphylaxis is:

Rapid form of tolerance

The form of drug's accumulation

The form of biotransformation

Manifestation of drug dependence

Combined action of the drugs.

Notions, connected with combined action of medications, are:

Synergism and antagonism

Material accumulation

Drug dependence

Tolerance and tachyphylaxis

Elimination and excretion.

Adverse effects are represented by:

Direct toxic action

Accumulation

Antagonism

Synergism

Addition.

Repeated application of the drug may cause all listed, except:

Pharmaceutical interaction

Tolerance

Physical dependence

Functional accumulation

Psychological dependence/

Pharmacological receptor is:

Protein molecule specifically binding with the drug

Target cell affected by the drug

Target organ affected by the drug

Synaptic structure

Non of listed.

Agonist of pharmacological receptor is:

Drug stimulating receptor

Drug inhibiting receptor

Drug stimulating one subtype of receptor and inhibiting another one

Drug bound to receptor

Drug without affinity to receptor.

Antagonist of pharmacological receptor is:

Drug inhibiting receptor

Drug stimulating receptor

Drug stimulating one subtype of receptor and inhibiting another one
Drug bound to receptor
Drug without affinity to receptor.

Pharmacological receptors are located:
All listed
On the internal surface of cell membrane
On the external surface of cell membrane
In the nucleus
In the cytoplasm.

Drugs synergism is used:
For potentiation of general anesthesia
For antidote therapy of poisonings
For pharmaceutical drugs interaction
For prophylaxis of drugs side-effects
All listed.

Drugs antagonism is used:
For antidote therapy of poisonings
For potentiation of general anesthesia
For pharmaceutical drugs interaction
For prophylaxis of drugs side-effects
All listed.

Interaction between tetracycline and calcium salts during the absorption is:
Pharmacokinetic drugs interaction
Pharmaceutical drugs interaction
Pharmacodynamic drugs interaction
Physiological antagonism
Drugs combined action.

All, concerning tolerance, is true, except:
It is displayed in the allergic reactions
It is a result of repeated drug administration
It is displayed as a decrease of drugs efficacy
It is overcome by the increase in dose of the drug
It is due to activation of microsomal oxidation.

Material accumulation concerns:
Repeated administration of the drugs
Drugs interaction
Combined action of the drugs
Adverse effects of the drugs
Main effects of the drugs.

Quantitative characteristics of drug's pharmacokinetics are all, except:
Tolerance
Half-life
Clearance
Volume of distribution
Bioavailability

Inducers of microsomal oxidation are drugs, which:
Increase the activity of cytochrome P-450
Decrease the activity of cytochrome P-450
Increase the activity of glucuronide conjugation
Inhibit all liver enzymes
Induce all liver enzymes.

A young man with a craniocerebral trauma is in a comatous state. What route of the administration of cerebroactive preparation piracetam is the most suitable in this case?

Intravenous
Rectal
Subcutaneous
Oral
Inhalation.

Ambulance has been called to the man with bronchial asthma attack. Salbutamol is broncholytic agent used to stop spasm of bronchi. What way of salbutamol administration is the most appropriate in this case?

Inhalation
Intravenous
Intramuscular
Oral
Topical.

Antimalarial drug pyrimethamine was given orally to nursing mother to prevent the contamination of her baby. Which way of drugs' excretion is used in this case?

With mother's milk
With urine
With bile
With saliva
With perspired air.

A patient has chronic kidney disease. His renal clearance is decreased by 30%. What should be a dose of antibiotic for this patient, if the drug is excreted through kidneys?

Therapeutic dose decreased according to renal clearance
Overage therapeutic dose
Maximal therapeutic dose
Therapeutic dose increased according to renal clearance
Renal clearance is not taking into account.

A pregnant woman used tetracycline to treat intestinal infection. Her baby has "tetracycline teeth" as a result of interaction of this antibiotic with fetal tissues. What kind of adverse reactions has the baby?

Teratogeneous action
Direct toxic action
Idiosyncrasy
Mutagenous action
Cancerogeneous action.

Cardiac glycoside was used for emergency help to the patient with acute heart failure. It acts on the heart muscle and increases the force of contractions. How is such type of action called?

Direct action
Indirect action
Local action
Reflexive action
Irreversible action.

Down gradient drug crossing through the cell membrane is:

Passive diffusion
Active transport
Biological pump
Endocytosis
Phagocytosis.

Enteral route of administration is only:

Sublingual
Subcutaneous
Intranasal
Transcutaneous
Intravenous.

Tachyphylaxis is:

Rapid form of tolerance
Material accumulation of a drug
Functional accumulation of a drug
Physical dependence on the drug
Psychological dependence on the drug.

Abstinence is:

Phenomenon of deprivation
Allergic reaction
Manifestation of the idiosyncrasy
Cancerogenic reaction
Mutagenic reaction.

Side-effects are:

Unwanted reactions caused by the therapeutic dose of the drug
Unwanted reactions caused by the toxic dose of the drug
Useful effects for which we use the drug
Effects after repeated drug administrations
Effects of non-medical use of the drug.

Module 1. Lesson 5. Medicinal drugs influencing afferent innervation. Anesthetic, astringent, covering and adsorbing medicinal drugs. Irritants

Loss of pain sensation in the site of administration of lidocaine is:

Local action
Resorptive action
Reflexive action
Selective action
Irreversible action.

Anti-arrhythmic action of lidocaine after its absorption into the blood is:

Resorbtive action

Local action

Reflexive action

Selective action

Irreversible action.

There are two groups of local anesthetics:

Esters of para-amino-benzoic acid and amides

Typical and atypical

Narcotic and non-narcotic

Liquid and non-liquid

Inhalation and intravenous.

Local anesthetics from esters group are all, except:

Lidocaine (Xycainum)

Procaine (Novocainum)

Tetracaine (Dicainum)

Benzocaine (Anaesthesinum)

Cocaine.

Local anesthetic from amides group is only:

Lidocaine (Xycainum)

Procaine (Novocainum)

Tetracaine (Dicainum)

Benzocaine (Anaesthesinum)

Cocaine.

Anesthetic for all kinds of local anesthesia is:

Lidocaine

Procaine

Benzocaine

Articaine

Bupivacaine.

Anesthetic only for surface local anesthesia is:

Benzocaine

Procaine

Trimecaine

Lidocaine

Bupivacaine.

Local anesthetic, which is not used together with sulfa drugs, is:

Procaine

Lidocaine

Trimecaine

Bupivacaine

Articaine.

Benzocaine is used for surface anesthesia only because of its:

Poor water solubility

High toxicity

High potency
Anti-arrhythmic action
Vasodilation.

Local anesthetics realize their action by:
Specifically plugging sodium channels
Binding to receptors
Coupling with G-protein
Action on enzymes
Action on carrier molecule.

Procaine is:
Used for infiltration, conductive, and spinal anaesthesia
Local anesthetic from amides group
The most potent local anaesthetic
Used only for surface anaesthesia
The most toxic local anesthetic.

Lidocaine has the following advantages over procaine, except:
Minimal effect on the heart
Longer duration of action
Suitable for all types of anesthesia
No interaction with sulphonamides
Less allergic properties.

Local anesthetics have the following common properties, except:
Duration of action of esters is longer than that of amides
They are bases
The anesthetic activity rises at alkaline pH
Ester local anesthetics are metabolized by esterases in blood
Amide local anesthetics are metabolized by hepatocytes.

Lidocaine is used in:
All kinds of anesthesia
Infiltration anesthesia only
Surface anesthesia only
Spinal anesthesia only
None of listed.

Local anesthetic with denominated anti-arrhythmic properties is:
Lidocaine
Articaine
Bupivacaine
Benzocaine
Procaine.

Non-organic astringent is:
Bismuth subnitrate
Tannin
Bark of oak
Activated charcoal
Mustard seeds.

Tannin has the following properties, except:
It neutralizes gastric juice
It forms albuminates
It protects nerve endings in the mucous membrane
It precipitates alkaloids in the gut
It is used for gargling.

Tannin's anti-inflammation action is due to:
Formation of albuminates
Adsorption of toxic substances
Formation of colloidal covering
Local anesthesia
Irritation of sensitive nerve endings.

Activated charcoal realizes its action by:
Adsorption of toxic substances
Formation of albuminates
Formation of colloidal covering
Local anaesthesia
Irritation of sensitive nerve endings.

Mucus of starch realizes its action by:
Formation of colloidal covering on the mucous membrane
Formation of albuminates on the surface of mucous membrane
Adsorption of toxic substances
Local anaesthesia
Irritation of sensitive nerve endings.

Mustard seeds act by:
Irritation of sensitive nerve endings
Formation of the protective film of albuminates
Adsorption of the toxic substances
Formation of colloidal covering
Local anaesthesia.

Menthol is characterized by all. except:
Vasodilation in the site of application
Irritation of sensitive nerve endings
Reflexive action on coronary blood vessels
Constriction of blood vessels in the site of application
Use in acute rhinitis and bronchitis.

Reflexly acting expectorant is:
Mucaltinum
Sodium bicarbonate
Trypsin
Acetylcysteine
Ambroxol.

All drugs irritate sensitive nerve endings, except:
Protectives

Expectorants
Irritants
Laxatives
Bitters.

Laxative, used in acute poisonings, is:

Magnesium sulphate
Castor oil
Bisacodyl
Root of Rheum
None of listed.

Bitters are:

Stimulants of appetite
Suppressors of appetite
Drugs for replacement therapy
Antacid drugs
Suppressors of gastric secretion.

Laxatives, used in chronic constipation, are all. except:

Magnesium sulphate
Castor oil
Bisacodyl
Preparations of Rheum
Preparations of Senna.

Activated charcoal (Carbo activatus) is used to treat all diseases, except:

Peptic ulcer
Acute poisoning
Dyspepsia
Meteorism
Chronic intoxication.

Irritant for emergence help in syncope is:

Solution of ammonia
Menthol
Mustard plaster
Lidocaine
Tannin.

Solution of ammonia is used for emergence help:

By inhalation from the cotton
Sublingually
Orally
Intravenously
Intramuscularly.

Irritant, used as nasal drops, is:

Menthol
Mustard plaster
Solution of ammonia
Bismuth subnitrate

Decoction from the seeds of flax (Linum).

Emotional overstrain before exam has provoked syncope in a student. Solution of ammonia was given to the patient. What is the initial link in the action of this preparation?

Irritation of sensitive nerve endings in the upper airways

Irritation of sensitive nerve endings in the stomach

Irritation of sensitive nerve endings in the skin

Direct stimulation of the brain structures

Direct stimulation of the bronchi and lungs.

Oil solution of menthol has been prescribed to the patient with acute rhinitis as nasal drops. A result was a reduction of edema of nasal mucous membrane and exudation. What is the background of such therapeutic effect?

Constriction of blood vessels

Dilation of blood vessels

Irritation of sensitive nerve endings

Inhibition of inflammation

Inhibition of allergic reaction.

A surgeon is going to perform the operation under the local anesthesia. The probable duration of operation is more than 1 hour. In the past the patient had ventricular extrasystoles. Which anesthetic is reasonable to choose for local anesthesia?

Lidocaine

Procaine

Benzocaine

Articaine

Ultracaine.

A patient has phlegmon of the hand. It is necessary to perform the incision in this area under the local anesthesia. Which local anesthetic should be selected, if it must be active in the purulent medium?

Lidocaine

Novocainum

Procaine

Benzocaine

Articaine.

Astringent drug with antidote properties is:

Tannin

Bismuth subnitrate

Activated charcoal

Decoction of flax semen

Mucus of starch.

Only one drug from the list is used for the poison absorption in the gut:

Activated charcoal

Tannin

Mucus of starch

Procaine

Lidocaine.

All local anesthetics are:

Weak bases
Weak acids
Salts of alkaline metals
Salts of heavy metals
None of listed.

Irritant drug, which produces constriction of blood vessels in the site of applying, is:

Menthol
Mucaltinum
Mustard seeds
Solution of ammonia
Turpentine oil.

The effect of mustard bags used in the treatment of pneumonia:

Reflexive action
Distracting action
Irritant action
Local vasodilation
Local hyperemia.

Module 1. Lesson 6. Medicinal drugs acting in the cholinergic synapses. M-N-cholinomimetics. Anticholinesterases. M-cholinomimetics. N-cholinomimetics. M-cholinoblockers. N- cholinoblockers

Cholinomimetics may cause all following side-effects, except:

Constipation and urinary retention
Bradycardia
Bronchospasm
Hypersalivation
Sweating.

The following information concerning anticholinesterases is correct, except:

Reactivators of cholinesterase are used in Belladonna poisoning
They are used for treatment of paralysis
They are used for de-curarization
Galanthamine penetrates through blood-brain barrier
Poisoning with irreversibly acting anticholinesterases is treated by reactivators of cholinesterase.

Neostigmine is characterized by:

Effectiveness in the treatment of paralysis and myasthenia
High ability to penetrate central nervous system
Irreversible inhibition of acetylcholinesterase
Effectiveness in the treating of gastric ulcer
Its ability to cause block of ganglia.

Pilocarpine is:

Used for the treatment of glaucoma
M-cholinoblocking drug
Used for investigation of eye bottom
Used for selection of glasses
Used in patients with bronchial asthma.

In the case of Belladonna poisoning neostigmine will antagonize the following symptoms, except:

Hallucination
Palpitation
Dryness of mouth
Blurring of vision
Urinary retention.

The patient is suffering from myasthenia gravis. The drug for his treatment is:

Pyridostigmine
Lobeline
Atropine
Platyphylline
Pilocarpine.

The patient is suffering from paralysis after the stroke. The drug for his treatment is:

Galanthamine
Lobeline
Atropine
Platyphylline
Pilocarpine.

A patient with glaucoma is prescribed with M-cholinomimetic. This drug is

Pilocarpine
Nicotine
Lobeline
Butylscopolamine
Platyphylline.

Pilocarpine was prescribed to treat glaucoma. It is from the group of:

M-cholinergic agonists
M,N-cholinergic agonists
N-cholinergic agonists
Anticholinesterases
M-cholinoblockers.

Lobeline was given intravenously in the respiratory arrest. It is from the group of:

N- cholinergic agonists
M-cholinergic agonists
M-, N-cholinergic agonists
Anticholinesterases
M-cholinoblockers.

Lobeline:

Stimulates N-cholinergic receptors
Stimulates M-cholinergic receptors
Stimulates M- and N-cholinergic receptors
Is depolarizing myorelaxant
Is ganglionic blocker.

Stimulation of respiration by lobeline is due to stimulation of N-cholinergic receptors:

In Zona carotis
In the brain
In the adrenal medula
In the skeletal muscles
In the ganglia.

An overdose of tubocurarine should be treated with:

Neostigmine
Reactivators of cholinesterase
Lobeline
Atropine
Apomorphine.

True information, concerning the location of cholinergic receptors, is:

All listed
M-cholinergic receptors are situated in the central nervous system
M-cholinergic receptors are situated in the exocrinal glands
M-cholinergic receptors are situated in the smooth muscles
M-cholinergic receptors are situated in the myocardium.

True information, concerning the location of cholinergic receptors, is:

All listed
N-cholinergic receptors are situated in the brain
N-cholinergic receptors are situated in the ganglia
N-cholinergic receptors are situated in the skeletal muscles
N-cholinergic receptors are situated in Zona carotis.

True information, concerning cholinergic receptors, is:

M-cholinoreceptors are stimulated by muscarine and inhibited by atropine
N-cholinoreceptors are stimulated and inhibited by tubocurarine
N- cholinoreceptors are stimulated by ganglionic blockers
M- and N-cholinergic receptors are not located in the brain
N-cholinoreceptors are not stimulated and inhibited by nicotine.

Duration of action of N-cholinomimetics after intravenous administration is:

3-5 minutes
3-5 hours
3-5 days
They do not act after intravenous administration
They never are given intravenously.

Nicotine is characterized by all, except:

It is used in clinic to treat asphyxia
It is an alkaloid of tobacco
In a low dose it stimulates N-cholinoreceptors
In a high dose it inhibits N-cholinoreceptors
It causes tolerance and substance dependence.

In complex treatment of the child suffering from cerebral palsy, a doctor decided to include anticholinesterase drug moderately improving mental development. What drug is prescribed to the child?

Galanthamine

Proserinum
Neostigmine
Pilocarpine
Lobeline.

A patient after the stroke has paralysis of the hand and leg. To restore the movements of the paralyzed extremities the patient was treated with cholinomimetic. Which of the listed drugs was used for this purpose?

Neostigmine
Pilocarpine
Lobeline
Muscarine
Nicotine.

A patient with glaucoma is prescribed with M-cholinomimetic as eye membranes. Its usage in clinic is limited by strong systemic activity and toxicity. Which drug is prescribed?

Pilocarpine
Neostigmine
Lobeline
Platyphylline
Galanthamine.

A patient with acute intoxication with gaseous poison had respiratory arrest. Lobeline was given intravenously to this patient and spontaneous breathing was restored in 1-2 minutes. Which pharmacological group is lobeline from?

N- cholinomimetics
M-cholinomimetics
Direct M-, N-cholinomimetics
Anticholinesterases
M-cholinoblockers.

For testing refraction of the eye atropine was instilled into the conjunctival sac. On completion of the procedure another cholinergic drug was used to counteract midriasis and cycloplegia caused by atropine. What was this drug?

Pilocarpine
Lobeline
Butylscopolamine
Pirenzepine
None of listed.

A patient suffering from myasthenia is treated with neostigmine. The therapy has been complicated by nausea, diarrhea, hypersalivation, and sweating. Stimulation of which cholinergic receptors is responsible for these side-effects?

Peripheral M-cholinoreceptors
Central M-cholinoreceptors
Central N-cholinoreceptors
Peripheral N-cholinoreceptors of muscular subtype
Peripheral N-cholinoreceptors of ganglionic subtype.

It is necessary to prescribe a medication to a patient with glaucoma. Which anticholinesterase drug (tertiary amine) isn't used in ophthalmology due to its irritative influence on the eye conjunctiva?

Galanthamine
Atropine
Physostigmine
Neostigmine
Carbachol.

A child poisoned with mushrooms, namely fly agarics, has been taken to the toxicological department with hypersalivation, vomiting, spastic pains in the abdomen, and hallucinations. Which alkaloid containing in these mushrooms produces M-cholinoreceptors hyperstimulation?

Muscarine
Nicotine
Lobeline
Atropine
Galantamine.

A farmer processed plants in his garden with insecticidal solution without personal protection equipment. After the work salivation, short breathing, stomachache, and diarrhea have begun. Intoxication with organophosphates has been diagnosed. Which preparation should be used for emergency help?

Alloxim
Neostigmine
Pilocarpine
Lobeline
Tannin.

Use of eye drops in a patient with glaucoma results in miosis, regulation of the eye for near vision, and reduction of intraocular pressure. What group of drugs causes such effect?

M-cholinergic agonists
M-cholinergic antagonists
N-cholinergic agonists
Reactivators of cholinesterase
None of the listed groups.

Atropine blocks M-cholinoreceptors, so it has:

Receptor mechanism of action
Genom-tropic mechanism of action
Membrane-tropic mechanism of action
Enzyme-tropic mechanism of action
None of listed.

Atropine causes:

Cycloplegia
Spasm of accommodation
Miosis
A decrease of intraocular pressure
Any ocular effects.

Atropine exerts:

A decrease in gastric secretion
Spasm of smooth muscles
Bradycardia
An increase in salivation

An increase in sweat secretion.

Atropine is M-cholinoblocker, which causes:

Dilation of bronchi

Spasm of bronchi

Hypersecretion of bronchial glands

An increase in motility of the gut

An increase in the tone of urinary bladder

Atropine blocks:

M-cholinoreceptors of all subtypes

M1-cholinoreceptors

N-cholinoreceptors of all subtypes

N-cholinoreceptors of ganglionic subtype

N-cholinoreceptors of muscular subtype.

Atropine is:

Non-selective cholinoblocker

Selective cholinoblocker

Non-selective adrenergic agonist

Selective adrenergic agonist

Non-selective adrenergic antagonist.

Atropine is used to treat

Colic

Intestinal atonia

Atonia of the urinary bladder

Glaucoma

Tachycardia.

Indications to use of atropine are all, except:

Atonia of the gut after the surgery

Gastric ulcer

Colic

Bradycardia

Preanesthetic medication.

Ipratropium bromide is designed for the treatment of:

Bronchial asthma

Belladonna poisoning

Gastric peptic ulcer

Ocular diseases

Spasms of the gut.

Side-effects of atropine are all, except:

Frequent urination

Constipation

Urinary retention

Dry mouth

Tachycardia.

The most long lasting cycloplegia is caused by:

Atropine
Scopolamine
Platyphylline
Tropicamide
Pilocarpine.

Pirenzepine is beneficial in the treatment of:

Gastric peptic ulcer
Colic
Bronchospasm
Atrio-ventricular block
Some acute poisonings.

M-cholinoblockers, which may cause dry mouth as a side-effect, are all, except:

Pilocarpine
Hyoscine
Atropine
Butylscopolamine
Platyphylline.

M-cholinoblockers do not cause such side effect-effect as:

Hypersalivation
Dry mouth
Tachycardia
Blurred vision
Urine retention.

Belladonna poisoning is diagnosed in a patient. The antidote is:

Neostigmine
Lobeline
Atropine
Platyphylline
Pilocarpine.

Myorelaxation caused by tubocurarine is due to:

Blockage of N-cholinergic receptors in the skeletal muscles
Blockage of N-cholinergic receptors in the central nervous system
Blockage of N-cholinergic receptors in the adrenal medula
Blockage of N-cholinergic receptors in Zona carotis
Blockage of N-cholinergic receptors in the ganglia.

Tubocurarine is:

Antidepolarizing myorelaxant
Depolarizing myorelaxant
Local anesthetic
General anesthetic
Anticholinesterase.

Myorelaxation by tubocurarine is used:

In surgeries under the general anesthesia
In diagnostic investigations
In shock and collapse

In surgeries under the local anesthesia
In all listed cases.

Succinylcholine (Dithylinum) is:
Depolarizing myorelaxant
Anti-depolarizing myorelaxant
Anticholinesterase
Myorelaxant of central action
General anesthetic.

Succinylcholine (Dithylinum):
All listed
Is depolarizing myorelaxant
Has short duration of action
May cause long-lasting apnoea in some patients
Myorelaxant for short surgeries.

If succinylcholine has caused apnoea, emergence help is:
Blood transfusion and apparatus lungs ventilation
Neostigmine
Reactivators of cholinesterase
Forced diuresis
Adrenalin (intracardially).

Succinylcholine causes long-lasting apnoea in patients with:
Deficit of pseudocholinesterase
Deficit of monoaminoxidase
Deficit of catechol-orto-methyl-transferase
Deficit of glucose-6-phosphodehydrogenase
Deficit of cyclooxygenase.

Ganglionic blockers:
Block N-cholinoreceptors in the parasympathetic and sympathetic ganglia
Block N-cholinoreceptors in the parasympathetic ganglia
Block N-cholinoreceptors in the sympathetic ganglia
Block N-cholinoreceptors in the skeletal muscles
Block central N-cholinoreceptors.

Ganglionic blockers are used in all cases, except:
Collapse
Colic
Acute hypertension
Controlled hypotension in the surgeries
Bronchial asthma attack.

Postural hypotension caused by ganglia blocker is a result of:
Dilation of blood vessels and redistribution of blood
Relaxation of smooth muscles in the gut
Relaxation of smooth muscles in the bronchi
Inhibition of gastric secretion
Lowering of the intraocular pressure.

Only one preparation belongs to ganglionic blockers:

Hexamethonium
Succinylcholine
Tubocurarine
Atropine
Pilocarpine.

Acute poisoning with organophosphates should be treated by:

Atropine
Neostigmine
Pyridostigmine
Pilocarpine
Lobeline.

Only one of the listed drugs is indirect-acting cholinomimetic:

Neostigmine
Pilocarpine
Lobeline
Carbachol
Acetylcholine.

All mentioned M-cholinoblockers have natural origin, except:

Pirenzepine
Atropine
Scopolamine
Platyllyline
Belladonna extract.

Prifinium bromide is used for the treatment of child with vomiting and spastic pain in the abdomen. Which group of cholinergic drugs is it from?

M-cholinoblockers
N-cholinoblockers
M-cholinomimetics
N-cholinomimetics
Anticholinesterases.

All listed preparations are myorelaxants, except:

Hexamethonium
Tubocurarine
Pilocarpine
Rocuronium
Succinylcholine.

Module 1. Lesson 7. Medicinal drugs influencing neurotransmission in the adrenergic synapses. Adrenomimetics, sympathomimetics. Antiadrenergic medicinal drugs. Sympatholytics. Dopaminergic medicinal drugs

Ephedrine exerts all effects, except:

Produces atrio-ventricular block
Releases stored noradrenaline from nerve terminals
Produces bronchodilation

Stimulates central nervous system
Rises systolic blood pressure.

Dobutamine is selective beta-adrenomimetic for treatment of:

Acute heart failure
Bronchial asthma
Tachycardia
Hypertension
Angina pectoris.

Salbutamol is:

Bronchodilator
Indicated in tachyarrhythmia
Natural catecholamine
Depressant of heart function
Cardioselective adrenomimetic

Adrenaline is used to treat all diseases and conditions, except:

Angina pectoris
Attack of bronchial asthma
Hypoglycemia
Anaphylactic shock
Heart arrest.

Adrenergic agonist, used to prevent premature labor, is;

Partusisten
Dobutamine
Ephedrine
Epinephrine
Norepinephrine.

Adrenaline is used for prolongation of local anesthesia due to:

Constriction of blood vessels
Dilation of bronchi
Hyperglycemia
Inhibition of the gut motility
Stimulation of the heart work.

Alpha-adrenomimetics cause:

An increase in blood pressure
Cycloplegia
Miosis
Bronchodilation
Hyperglycemia.

Alpha-adrenomimetics, applied topically on the mucous membrane, cause:

Vasoconstriction and decrease in exudation
An increase in blood pressure
Spasm of accommodation and miosis
Dilation of bronchi
Elevation of glucose level in the blood.

All, concerning pharmacokinetics of adrenaline, is true, except:

It is well absorbed in the gut

It is administered subcutaneously

It is used topically

It is destroyed in the blood

Its duration of action is 15-30 minutes.

Adrenalin (topically) stops capillary bleeding due to:

Constriction of blood vessels

Dilation of bronchi

Stimulation of heart contractions

An increase in glucose level in the blood

An increase in blood pressure.

Adrenalin belongs to:

Alpha, beta-adrenomimetics

Alpha -adrenomimetics

Beta-adrenomimetics

Sympathomimetics

Sympatholytics.

Adrenomimetic for intracardial administration in the heart arrest is:

Adrenalin

Noradrenaline

Ephedrine

Dobutamine

Salbutamol.

Indirect-acting adrenomimetic with psychomotor stimulant action is:

Ephedrine

Adrenalin

Noradrenaline

Fenoterol

Salbutamol.

Adrenergic agonist, caused tolerance and drug dependence, is:

Ephedrine

Epinephrine

Phenylephrin

Naphazoline

Naphazoline.

A patient has bronchial asthma co-existing with tachycardia. In this case the best preparation is:

Salbutamol

Orciprenaline

Norepinephrine

Epinephrine

Ephedrine.

Adrenergic agonist, used only as nasal drops, is:

Naphazoline

Phenylephrin

Norepinephrine
Epinephrine
Ephedrine.

True information, concerning the location of adrenoceptors, is:

All mentioned

Alpha1-adrenoceptors are located in the blood vessels

Alpha2-adrenoceptors are located on the presynaptic membrane of all sympathetic synapses

Beta1 -adrenoceptors are located in the heart

Beta2 -adrenoceptors are located in the bronchi.

True information, concerning adrenoceptors, is:

All mentioned

Alpha1-adrenoceptors are located in the blood vessels and constrict them

Beta2 -adrenoceptors are located in the blood vessels and dilate them

Beta1 -adrenoceptors are located in the heart and stimulate heart work

Beta2 -adrenoceptors are located in the bronchi and dilate them.

Naphazoline (Naphthizinum) is for the treatment of:

Acute rhinitis

Collapse

Shock

Hypoglycemia

Anaphylaxis.

Ephedrine, contrary to adrenalin, can cause:

Drug dependence

Tachycardia

Hypertension

Tremor

Restlessness.

Anaphylactic shock develops after the injection of procaine to a patient. Which adrenergic agent must be urgently administered in anaphylaxis?

Adrenaline hydrochloride

Phenylephrin

Ephedrine hydrochloride

Noradrenaline hydrotartrate

Naphazoline.

To perform fundoscopy an ophthalmologist instilled in the eye an agent capable to cause midriasis without cycloplegia. What preparation was instilled into the conjunctival sac?

Phenylephrin

Noradrenaline

Atropine

Pilocarpine

Fenoterol.

A patient is in collaptoid state. Phenylephrin is administered to him with a purpose to normalize blood pressure. What is its mechanism of action? Stimulation of alpha1-adrenoceptors

Stimulation of beta1-adrenoceptors

Stimulation of beta2-adrenoceptors

Stimulation of alpha2-adrenoceptors
Stimulation of all types of adrenoceptors.

A doctor was called to the patient with attack of bronchospasm. This patient also has angina pectoris. What drug should be chosen for emergency help?

Salbutamol
Ephedrine
Adrenaline
Halazoline
Dobutamine.

Adrenergic agonist was given to a patient with anaphylaxis. It stimulates all types of adrenoceptors, dilates bronchi, increases the frequency and force of heart beats, elevates blood pressure, and inhibits release of mediators of allergy. What drug is it?

Adrenaline hydrochloride
Noradrenaline hydrotartrate
Ephedrine hydrochloride
Partusisten (Fenoterol)
Phenylephrin (Mesatonum).

A patient has collapse caused by an overdose of ganglia blocker. What drug is the most effective for emergence help in this situation?

Phenylephrin
Dobutamine
Adrenaline
Halazoline
Naphazoline.

Nasal bleeding has developed in the young woman. A doctor imposed a tampon with a drug from the group of adrenergic agonists, and the bleeding stopped. What drug was used?

Adrenaline hydrochloride
Noradrenaline hydrotartrate
Ephedrine hydrochloride
Partusisten (Fenoterol)
Salbutamol.

A patient has hypoglycemic coma caused by insulin overdose. Beside the administration of glucose adrenergic drug was administered to him. From which of adrenoceptor agonists is it possible to expect the maximal therapeutic effect in the given situation?

Adrenaline
Phenylephrin
Ephedrine
Noradrenaline
Dobutamine.

An anesthesiologist prepares local anesthesia and adds adrenaline to the solution of lidocaine. His purpose is the prolongation of anesthesia. Which pharmacological effect of epinephrine is a background of such its use?

Constriction of blood vessels
Dilation of bronchi
Stimulation of heart contractility
Stimulation of lipolysis

Inhibition of gut motility.

A patient with spasmodic bronchitis was prescribed ephedrine, but during the first day of treatment tablets of ephedrine lost their positive effect. Which side-effect of ephedrine can we see in this case?

Tachyphylaxis

Tolerance

Drug dependence

Doping-effect

Hypersensitivity.

Propranolol is effective in the treatment of hypertension due to:

A decrease of cardiac output

An increase in peripheral vascular tone

Inhibition of norepinephrine release from presynaptic membrane

Myotropic action

Action on the central nervous system.

Side-effects of sympatholytics are all, except:

Dry mouth

Hypotension

Enlarging of salivary glands

Gastritis

Disturbances of sleeping.

Non-selective alpha-adrenoblockers are used for all, except:

Treatment of angina pectoris

Diagnostics of pheochromocytoma

Treatment of pheochromocytoma

Treatment of Raynaud's disease (spasms of blood vessels)

Treatment of hypertension.

A decrease in vascular tone, following reserpine administration, is due to:

Depletion of noradrenaline store

Antagonism of noradrenaline action

Inhibition of monoaminoxidase

Inhibition of noradrenaline synthesis

Direct relaxation of smooth muscle in the blood vessels.

The following statement, concerning prazosin, is not correct:

It blocks alpha2-adrenoceptors

It is antihypertensive agent

It causes vasodilation

It does not cause tachycardia

It blocks alpha1-adrenoceptors.

All the following are indications for the clinical use of propranolol, except:

Spasms of blood vessels

Hypertension

Tachyarrhythmia

Angina pectoris

Myocardial infarction.

Alpha-adrenoblockers may cause the following side-effect:

- Postural hypotension
- Reflex bradycardia
- A decrease in the intestinal motility
- Hypersalivation
- Hypertension.

Alpha-adrenoblockers can cause the following side-effects, except

- Constipation
- Postural hypotension
- Reflex tachycardia
- An increase of the intestinal motility
- Inhibition of ejaculation.

Tachycardia, accompanied the use of non-selective alpha-adrenoblocker, is due to:

- Blockage of presynaptic alpha 2-adrenoceptors
- Blockage of postsynaptic alpha1-adrenoceptors
- Blockage of postsynaptic alpha 2-adrenoceptors
- Sympatholytic action
- Intrinsic sympathomimetic activity.

Beside cardio-vascular diseases, doxazosin is effective in:

- Non-malignant hyperplasia of prostate
- Renal failure
- Inflammation of urinary bladder
- Renal colic
- Prostatitis.

Propranolol is:

- Non-selective beta-adrenoblocker
- Cardio-selective beta-adrenoblocker
- Non-selective alpha-adrenoblocker
- Alpha, beta-adrenoblocker
- Sympatholytic.

Side-effect of propranolol, caused by the blockage of beta2-adrenoceptors, is:

- Spasm of bronchi
- Bradycardia
- A decrease of cardiac output
- Somnolence
- Depression.

Adverse reaction of propranolol, caused by the blockage of beta1-adrenoceptors is:

- Bradycardia
- Spasm of bronchi
- Pain in the stomach
- Somnolence
- Depression.

Indications to use of propranolol include all diseases, except:

- Congestive heart failure

Angina pectoris
Hypertension
Hyperthyroidism
Migraine.

Contrary to propranolol, metoprolol:
Blocks beta1-adrenoceptors only
Blocks beta2-adrenoceptors only
Blocks alpha- and beta-adrenoceptors
Blocks alpha - adrenoceptors only
Does not influence any adrenergic receptors.

Interaction of labetalol with adrenoceptors may be described as:
Action on beta-adrenoceptors is more than the action on alpha-adrenoceptors
Action on alpha-adrenoceptors is more than the action on beta-adrenoceptors
Action on beta1-adrenoceptors is more than the action on beta2-adrenoceptors
Action on all types of adrenergic receptors is similar
Action on adrenergic receptors has not clinical importance.

Preparations from the group of alpha, beta-adrenoblockers are:
Labetalol and carvedilol
Propranolol and talinolol
Metoprolol and atenolol
Prazosin and doxazosin
Reserpine and guanetidine.

Sympatholytics are:
Presynaptically-acting antiadrenergic drugs
Postsynaptically-acting antiadrenergic drugs
Re-uptake inhibitors
Group of adrenoblockers
Group of adrenergic agonists.

Sympatholytic with central neuroleptic effect is only:
Reserpine
Ephedrine
Guanetidine
Phentolamine
Phenylephrin.

Reserpine is:
Sympatholytic
Non-selective beta-adrenoblocker
Cardio-selective beta-adrenoblocker
Non-selective alpha-adrenoblocker
Alpha, beta-adrenoblocker.

An elderly patient has mild hypertension and is prone to bronchospasm. Which antiadrenergic drug is contraindicated to this patient?
Propranolol
Prazosin
Metoprolol

Doxazosin
Atenolol.

A doctor has prescribed selective alpha1-adrenoceptor blocker for the treatment of hypertensive patient. Which drug belongs to this group?

Prazosin
Metoprolol
Propranolol
Atenolol
Reserpine.

A 40-year-old woman, suffering from hyperthyroidism, complains of palpitation. What drug should be prescribed for normalization of the heart rate?

Propranolol
Prazosin
Doxazosin
Reserpine
Methyldopa.

Propranolol is prescribed to a patient with angina pectoris. In which way it limits ischemia in the heart?

It reduces oxygen demand of myocardium
It decreases heart rate
It decreases heart output
It reduces minute volume of the heart
It lowers blood pressure.

Elderly man has moderate hypertension co-existing with adenoma of prostate. A physician has prescribed him antiadrenergic drug effective in both these diseases. What preparation has been prescribed?

Doxazosin
Prazosin
Propranolol
Talinolol
Metoprolol.

Beta-adrenoblocker is prescribed to the patient with heart arrhythmia. This drug has cardioselective action on beta1-receptors. What is the name of the mentioned drug?

Atenolol
Doxazosin
Prazosin
Propranolol
Labetalol.

Hypertensive patient was treated with preparation containing reserpine. The treatment was complicated by hyperacidic gastritis, abdominal cramps, and diarrhea. What is a cause of these side-effects?

Prevalence of parasympathetic impulsation over sympathetic one
Stimulation of parasympathetic impulsation
Central sedative action
Central antipsychotic action.
Other reason.

Propranolol was prescribed for the treatment of angina pectoris, but bradycardia and bronchospasm had been developed. What drug from the same group may be used for replacement of the first remedy?

Metoprolol

Labetalol

Prazosin

Doxazosin

Reserpine.

Prazosin belongs to:

Selective alpha-adrenoblockers

Non-selective beta-adrenoblockers

Cardio-selective beta-adrenoblockers

Non-selective alpha-adrenoblockers

Alpha, beta-adrenoblockers.

Ocular effect of beta-adrenoblockers:

Lowering of intra-ocular pressure

Miosis

Midriasis

Spasm of accommodation

Paralysis of accommodation.

Metoprolol is antiadrenergic drug from the group of:

Cardio-selective beta-adrenoblockers

Selective alpha-adrenoblockers

Non-selective beta-adrenoblockers

Non-selective alpha-adrenoblockers

Alpha, beta-adrenoblockers.

Targets for drug action in the adrenergic synapse are:

All listed

Deposition of norepinephrine

Re-uptake of norepinephrine

Presynaptic receptors

Postsynaptic receptors.

Preparation with catecholamine structure is:

Adrenaline

Salbutamol

Fenotrol

Phenylephrine

Ephedrine.

Ephedrine is more stable in the body than adrenalin, because it is:

An alkaloid

Natural catecholamine

Synthetic catecholamine

Guanetidine derivative

None of listed.

A patient has caught cold. He complains of runny nose. Nasal drops from which pharmacological group are suitable to treat acute rhinitis in this case?

Alpha-adrenomimetics

Beta-adrenomimetics

Alpha-adrenoblockers

Beta-adrenoblockers

Sympatholytics.

Module 1. Lesson 8. Drugs for general anesthesia. Pharmacology and toxicology of ethyl alcohol. Pharmacology of narcotic analgesics. Pharmacology of non-narcotic analgesics

Nitrous oxide is characterized by the following properties, except:

High liver toxicity

Good analgesia

Quick action

Poor muscle relaxation

Usage in obstetrics.

Analgesia stage of narcosis is characterized by the following:

Abolishing of pain

Excitement

Unconsciousness

Relaxation of skeletal muscles

Suppression of reflex activity.

False characteristic of the stage III of general anesthesia (stage of surgical anesthesia) is:

Excitement

4 planes of development

Progressive decrease of muscular tone

Inhibition of reflexes

Analgesia and unconsciousness.

Ketamine is:

All listed except long duration of action

Long acting general anesthetic

Increasing cardiac output

Producing profound analgesia

Not abolishing reflexes.

Drugs for inhalation general anesthesia are all, except:

Thiopental-sodium

Ether for narcosis

Halotane

Nitrous oxide

Isoflurane.

Halotane is:

All listed

Potent anesthetic

Volatile liquid

Non-irritant agent
Non-flammable.

Halotane may cause:
Sensitization of heart to catecholamines
Irritation of respiratory pathways
Spasm of bronchi
Constriction of blood vessels
An increase in blood pressure.

Ether is not widely used now because of:
All listed
Irritation of respiratory airways
Long induction into anesthesia
Inflammable properties
Unpleasant recovery from anesthesia.

A patient has myocardial infarction. Inhalation general anesthetic for analgesia is:
Nitrous oxide
Thiopental-sodium
Isoflurane
Halotane
Xenon.

Long-acting intravenous general anesthetic is:
Sodium oxibutyrates
Thiopental-sodium
Ketamine
Propofol
Sevoflurane.

Barbiturate for intravenous general anesthesia is:
Thiopental-sodium
Ketamine
Sodium oxibutyrates
Propofol
Isoflurane.

Ketamine's action is realized by:
Opioid receptors
Barbiturate receptors
Gamma-aminobutyric acid-receptors
Binding to lipids of cell membranes
Dopamine receptors.

Sodium oxibutyrates's action is realized by:
Gamma-aminobutyric acid-receptors
Opioid receptors
Barbiturate receptors
Serotonin receptors
Dopamine receptors.

All, concerning ethyl alcohol, is true, except:

It is used for general anesthesia

It is energy substrate

It has anti-shock action

It anti-foam action

It has antimicrobial action.

Ethyl alcohol is used for processing of surgical area in the concentration of:

70%

90%

40%

20%

None of listed.

Ethyl alcohol is used for processing of surgical tools in the concentration of:

90%

70%

40%

20%

None of listed.

Ethyl alcohol is used for compresses in the concentration of:

40%

90%

70%

20%

None of listed.

Ethyl alcohol is used for inhalation together with oxygen due to:

Antifoam action

Antiseptic action

Anti-shock action

Irritating action

Neurotropic action.

Drug for the treatment of alcohol abuse is:

Disulfiram (Teturam)

Naloxone

Unithiolum

Alloxim

Dithylinum.

Mechanism of action of inhalation general anesthetics relates to their:

Lipophilicity

Binding with receptors

Coupling to G-proteins

Plugging of ion channels

Inhibition of enzymes.

Opioid analgesics cause analgesia by the action on:

mu-opioid receptors

M-cholinoreceptors

Adrenoceptors
D2- dopamine receptors
H2- histaminereceptors

Morphine exerts all following central effects, except:

Constipation
Euphoria
Sedation
Cough suppression
Analgesia.

The main mechanism of non-opioid analgesics action is:

Inhibition of cyclooxygenase
Inhibition of phosphodiesterase
Inhibition of monoamine oxidase
An increase in noradrenaline release
Inhibition of dopamine re-uptake.

Non-opioid analgesics exert the following effects, except:

Immune depressive
Antipyretic
Anti-inflammatory
Analgesic
Anti-platelet.

The endogenous ligands of opioid receptors are:

Endorphins, enkephalins, and dynorphins
Endorphins
Enkephalins
Glutaminic acid
Dynorphins.

Opioid analgesics are used for:

All listed
Relief of pain associated with cancer
Acute pulmonary edema
Myocardial infarction
Neuroleptanalgesia.

A patient has severe cancer pain. Analgesic for him is:

Morphine
Naloxone
Metamizole
Acetylsalicylic acid
Acetaminophen.

A patient has traumatic shock. Analgesic for him is:

Trimepiridine
Naloxone
Nalorphine
Metamizole

Paracetamol.

A patient has trauma of brain. Narcotic analgesic contraindicated for him is:

Morphine

Nitrous oxide

Sodium oxibutyrates

Metamizole

Acetaminophen.

Trimepridine (Promedol) is better in colic than morphine because of:

Spasmolytic activity

High analgesic activity

Minimal side-effects

An increase in uterus tone

Low abuse potential.

Trimepridine (Promedol) is used for analgesia in labor because of:

Analgesic activity with stimulation of uterus contractions

Analgesic activity

Minimal side-effects

Spasmolytic activity

Stimulation of uterus contractions.

Acute poisoning with narcotic analgesics is diagnosed. Antagonist of opioid analgesics to treat this poisoning is:

Naloxone

Trimepridine

Tramadol

Fentanyl

Pentazocin.

The indications to aspirin use include:

All listed

Headache

Toothache

Fever

Rheumatism.

Non-opioid analgesics may exert following side-effects, except:

Drug dependence

Damage of gastric mucosa

Spasm of bronchi

Suppression of hemopoiesis

Bleeding.

Only one non-narcotic analgesic is salicylate:

Acetylsalicylic acid

Diclofenac-sodium

Metamizole

Acetaminophen

Indometacin.

Only one non-narcotic analgesic is para-aminophenol derivative:

Paracetamol (Acetaminophen)

Aspirin (Acetylsalicylic acid)

Phenylbutazone (Butadionum)

Metamizole (Analginum)

Meloxicam (Movalis).

Meloxicam is:

Selective cyclooxygenase-2 inhibitor

Non-selective cyclooxygenase inhibitor

Strong agonist of opioid receptors

Agonist-antagonist of opioid receptors

Antagonist of opioid receptors.

Non-opioid analgesics with strong anti-inflammatory action are all, except:

Paracetamol

Indometacin

Ibuprofen

Pyroxicam

Diclofenac-sodium.

Analgesic-antipyretic with weak anti-inflammatory action is:

Paracetamol

Indometacin

Ibuprofen

Pyroxicam

Diclofenac-sodium.

Metamizole is not used for:

Collagenosis

Headache

Toothache

Fever

Control of non-severe postoperative pain

Metimazole may cause such side-effect as:

Agranulocytosis

Gastric ulcer

Gastrointestinal bleeding

Liver lesions

Renal problems.

A patient has arthritis of knee joint. Non-narcotic analgesics for his treatment are all, except:

Paracetamol

Indometacin

Ibuprofen

Pyroxicam

Diclofenac-sodium

If the drug blocks cyclooxygenase and exerts anti-inflammation, anti-pyrexia and analgesia, it belongs to:

Non-opioid analgesics
Opioid analgesics
General anesthetics
Local anesthetics
Antihistamines.

If the drug binds to opioid receptors, exerts analgesia, and causes drug dependence, it belongs to:

Opioid analgesics
Non-opioid analgesics
General anesthetics
Local anesthetics
Antihistamines.

Nociception is:

Pain perception in the organism
Limitation of pain in the organism
Limitation of pain by analgesics
Stimulation of non-specific resistance
Abolishing of pain.

Anti-nociception is represented by:

Opioid receptors and their ligands
Adrenergic receptors and norepinephrine
Cholinergic receptors and acetylcholine
H-receptors and histamine
Serotonin receptors and serotonin.

Morphine hydrochloride has been administered to a patient with traumatic shock to provide analgesia. What is the mechanism of analgesic effect of this drug?

Interaction with opioid receptors
Inhibition of pain impulses conduction
Blockade of sensitive nerve endings
Change of pain perception
Inhibition of algogens formation in peripheral tissues.

An unconscious patient has been taken to a hospital. His skin is cold, pupils are miotic, breathing is of Cheyne-Stokes type. The diagnosis is: Acute morphine poisoning. What drug is necessary to give as antagonist of opioid analgesic?

Naloxone
Nalorphine
Naltrexone
Buprenorphine
Pentazocine.

A patient with headache, caused by high body temperature, was relieving his pain with the help of metamizole. Point out other effect of this drug that contributes to the improvement of patient's condition.

Anti-pyretic effect
Sedative effect
Anti-platelet effect
Antioxidant effect
Antimicrobial effect.

A child with hyperthermia has been prescribed with non-opioid analgesic which has strong antipyretic action. In toxic doses it can damage liver cells. What drug is this?

Paracetamol
Acetylsalicylic acid
Metamizole
Indometacin
Meloxicam.

Common property of general anesthetics, opioid and non-opioid analgesics is:

Abolishing of pain
Abolishing of reflexes
Loss of consciousness
Relaxation of muscles
Anti-inflammation.

Excitement stage of general anesthesia is accompanied by:

Disregulation of body functions
Analgesia and unconsciousness
Stabilization of cardio-vascular system
Stabilization of respiration
Relaxation of skeletal muscles.

Surgical stage of general anesthesia is characterized by all, except:

Psychomotor excitement
Areflexia
Myorelaxation
Autonomic stabilization
Unconsciousness.

Opioid analgesic from the group of phenanthrene derivatives is:

Morphine
Metamizole
Meloxicam
Trimepiridine
Tramadol.

Blockade of cyclooxygenase by non-opioid analgesics leads to:

Inhibition of prostaglandins synthesis
Stimulation of prostaglandins synthesis
Stimulation of endogenous opiates turnover
Inhibition of norepinephrine synthesis
Activation of acetylcholine degradation.

Module 1. Lesson 9. Neuroleptics, tranquilizers, sedatives, and lithium salts, Hypnotic, anticonvulsant, and antiparkinsonian medicinal drugs. Drugs for prophylaxis and treatment of multiple sclerosis

Mechanism of action of diazepam is connected with:

Benzodiazepine receptors of chlorine ion channels
Barbiturate receptors of chlorine ion channels

Central M-cholinoreceptors
Peripheral M-cholinoreceptors
Alpha-adrenoceptors.

Anxiolytics are used:
For decrease in stress and phobia
For hypnotic action
For analgesic action
For antipsychotic action
For anesthetic action.

Benzodiazepine used for termination of seizure attack is:
Diazepam
Nitrazepam
Phenazepam
Medazepam
Gidazepam.

Sodium bromide belongs to the group of:
Sedatives
Anxiolytics
Neuroleptics
General anesthetics
Local anesthetics.

Indications to use of sodium bromide are all, except:
Acute psychosis
Neurastenia
Hysteria
Epilepsy
Insomnia.

Bromism is:
Accumulation of bromides in the body
Acute poisoning with bromides
Therapeutic action of bromides
Scheme of treatment with bromides
None of listed.

Tincture of valerian is used to treat all, except:
Epilepsy
Light forms of neurosis
Insomnia caused by restlessness
Cardioneurosis
Spasms in the gut.

Tincture of valerian belongs to:
Organic sedatives
Anxiolytics
Neuroleptics
Non-organic sedatives
Local anesthetics.

Neuroleptanalgesia is:

- Co-administration of neuroleptic and narcotic analgesic
- Co-administration of neuroleptic and non-narcotic analgesic
- Co-administration of local anesthetic and narcotic analgesic
- Co-administration of anxiolytic and narcotic analgesic
- Co-administration of inhalation and intravenous general anesthetics.

All preparations are neuroleptics, except:

- Diazepam
- Chlorpromazine
- Trifluoperazine
- Haloperidol
- Chlorprothixene.

The most suitable drug combination for neuroleptanalgesia is:

- Droperidol and fentanyl
- Chlorpromazine and morphine
- Haloperidol and pentazocine
- Chlorpromazine and diphenhydramine
- Diphenhydramine and metmizole.

Neuroleptics exert:

- All listed
- Antipsychotic action
- Anxiolytic action
- Cataleptic action
- Antiemetic action

If the patient has schizophrenia accompanied by hallucinations and psycho-motor excitement, he must be treated with:

- Chlorpromazine
- Diazepam
- Tincture of valerian
- Sodium bromide
- Chlordiazepoxide.

If the patient has acute psychosis accompanied by hallucinations and agitation, he must be treated with

- Haloperidol
- Diazepam
- Tincture of valerian
- Medazepam
- Gidazepam

If the patient has severe vomiting caused by anticancer chemotherapy, he may be treated with:

- Trifluoperazine
- Diazepam
- Tincture of valerian
- Carbamazepine
- Lithium carbonate.

The patient is in panic state before surgical treatment. Preparation of choice in this case is:

Diazepam
Trifluoperazine
Chlorpromazine
Phenobarbital
Carbamazepine

Anxiolytics are used in clinic:

For treatment of neurosis
For anti-allergic action
For analgesic action
For antipsychotic action
For antidepressive action.

Day-time tranquilizer is:

Gidazepam
Nitrazepam
Diazepam
Sibazonum
Phenazepam.

Typical day-time tranquilizer:

Has not hypnotic action
Has not anxiolytic effect
Has not sedative action
Has potent anti-seizure action
Produces strong myorelaxation.

Receptors, which are mostly responsible for antipsychotic effect of typical neuroleptics, are:

Dopamine receptors
Serotonin receptors
Alpha-adrenoceptors
M-cholinoreceptors
Histamine receptors.

A patient has schizophrenia accompanied by hallucinations and agitation. Typical neuroleptic from the group of phenothiazine derivatives was used to treat him. Which neuroleptic was prescribed?

Chlorpromazine
Haloperidol
Droperidol
Chlorprothixene
Sulpiride.

A patient has acute psychosis accompanied by hallucinations and psycho-motor excitement. What antipsychotic preparation from butyrophenone derivatives with sedative action and denominated catalepsy is indicated in this case?

Haloperidol
Clozapine
Trifluoperazine
Flunazine
Chlorpromazine.

An old woman addressed her doctor complaining of side-effects, which appeared while treatment with chlorpromazine. She was troubled with tremor and disturbances of movements. What is the mechanism of these side-effects?

Inhibition of neostriatum

Activation of hippocampus

Inhibition of reticular formation

Inhibition of hypothalamus

Inhibition of hippocampus

A patient with schizophrenia became aggressive. To abolish aggression, chlorpromazine was administered to him. The patient's attempt to rise soon after the injection resulted in collapse and unconsciousness. What is the cause of such complication?

Blockade of alpha-adrenoceptors

Blockade of D2-receptors

Blockade of serotonin receptors

Blockade of histamine-receptors

Blockade of M-cholinoceptors.

Myocardial infarction is accompanied by severe pain. Opioid analgesic fentanyl was administered intravenously together with short-acting potent neuroleptic for neuroleptanalgesia. Which drug should be chosen for this purpose?

Droperidol

Trifluoperazine

Chlorpromazine

Chlorprothixene

Haloperidol.

A patient is hospitalized in a clinic with diagnosis of manic-depressive (bipolar) disease. Which preparation is a drug of choice in this case?

Lithium carbonate

Diazepam

Chlorpromazine

Haloperidol

Sodium bromide.

After the emotional stress a patient was in the condition of nervous tension and had poor sleep. Doctor prescribed him diazepam. Which effect of this drug is responsible for its clinical use?

Tranquilizing effect

Central myorelaxative effect

Potentiative effect

Anti-seizure effect

Antipsychotic effect.

A student is diagnosed with neurosis accompanied by asthenia and depression. Which day-time tranquilizer may help to avoid the signs of neurosis without the break in patient's education?

Gidazepam

Diazepam

Chlordiazepoxide

Phenazepam

Clozapide.

Diazepam is prescribed to the patient who is in panic state before the surgery. What is the mechanism of anxiolytic action of this drug?

Stimulation of gamma-aminobutyric-acid-benzodiazepine receptor complex

Blockage of D2-dopamine receptors

Blockade of serotonin receptors

Blockade of central M-cholinoreceptors

Stimulation of barbiturate receptors.

A woman with neurasthenia was treated by the mixture containing non-organic sedative. Accumulation of this substance in the body has resulted in drowsiness, apathy, memory disturbances, skin rash, rhinitis, and cough. Which sedative may cause such condition?

Sodium bromide

Tincture of valerian

Chlordiazepoxide

Chlorpothixene

Lithium carbonate.

Anti-epileptic drug acting by inhibition of gamma-aminobutyric-acid transaminase is:

Sodium valproate

Phenobarbital

Diazepam

Carbamazepine

Phenytoin.

Levodopa is used for replacement therapy of Parkinson's disease instead of dopamine due to its:

Ability to penetrate central nervous system and transformation into dopamine

High efficacy

Ability to penetrate blood-brain barrier

Ability to transform into dopamine

Ability to inhibit cholinoreceptors.

Barbiturates may cause all following side-effects, except:

Euphoria

After-action

Tolerance

Return syndrome

Drug dependence.

The acute barbiturate poisoning is manifested by all, except:

Colic

Failing respiration

Comatose state

Fall of blood pressure

Myorelaxation.

The clinical uses of barbiturates include:

Insomnia and epilepsy

Depression and bipolar disease

Delirium and abstinence

Psychosis and schizophrenia

Neurosis and neurasthenia.

The drugs of first choice for treatment of epilepsy with generalized tonic-clonic seizures are:

All listed

Phenytoin

Phenobarbital

Carbamazepine

Sodium valproate.

The drug for all forms of epilepsy is:

Sodium valproate

Carbamazepine

Phenytoin

Phenobarbital

Diazepam

Hypnotic with minimal disturbances in the sleep structure is:

Nitrazepam

Phenobarbital

Thiopental-sodium

Carbamazepine

Phenytoin.

Mechanism of phenobarbital's action relates to:

Barbiturate receptors of chlorine ion⁻ channels

Benzodiazepine receptors of chlorine ion channels

Central M-cholinoreceptors

Peripheral M-cholinoreceptors

Central alpha-adrenoceptors.

Hypnotic, that does not cause after-action and drug dependence, is:

Zolpidem

Nitrazepam

Phenobarbital

Carbamazepine

Phenytoin.

Beside epilepsy, anti-epileptics are used to treat:

Neuralgia of n. trigeminus

Polyneuritis

Paralysis

Myasthenia

Neurastenia.

Combined antiparkinsonian drug is:

Nakom

Levodopa

Amantadine

Selegelin

Trihexyphenidyl.

Side-effect of phenytoin, which differs from adverse reactions of other anti-epileptics, is:

Hyperplasia of gums

Ataxia
Tremor
Gastro-intestinal distress
Disturbances of hemopoiesis.

Central cholinolytic for the treatment of Parkinson disease is:

Trihexyphenidyl
Nakom
Levodopa
Amantadine
Selegelin.

Drug for decreasing in muscle spasticity is:

Midocalm
Clonazepam
Lamotridgine
Gabapentin.
Selegelin.

The strongest group of psychoactive drugs is:

Neuroleptics
Tranquilizers
Sedatives
Hypnotics
Anti-epileptics.

The main idea of anti-parkinsonian therapy is:

To restore the balance between dopamine and acetylcholine in the basal ganglia
To improve adrenergic processes in the reticular formation
To improve cholinergic neurotransmission in the cortex of brain
To inhibit degradation of gamma-aminobutyric acid in the brain
To normalize the balance norepinephrine – acetylcholine in the peripheral organs.

Increased level of sodium chloride in the body is the precondition for the therapy of:

Accumulation of bromides
Acute poisoning with barbiturates
Acute poisoning with benzodiazepines
Chlorpromazine overdose
Adverse reactions of anti-epileptics.

Only one drug in the list is benzodiazepine anxiolytic:

Diazepam
Gabapentin.
Selegelin
Phenobarbital
Phenytoin.

Pharmacokinetics of phenobarbital is characterized by:

The induction of microsomal oxidation
The inhibition of microsomal oxidation
The absence of hepatic biotransformation
Active metabolism in the blood

None of listed.

Module 1. Lesson 10. Antidepressants. Nootropic preparations. Psychomotor stimulants. Psychodysleptics. Actoprotectors, adaptogens

Imipramine causes antidepressant action due to:

Inhibition of monoamines re-uptake
Inhibition of monoamine oxidase
Blockage of alpha-adrenoceptors
Blockage of dopamine receptors
Blockage of central M-cholinergic receptors.

Antidepressants are used to treat:

Pain syndromes
Schizophrenia
Epilepsy
Anxiety
Insomnia.

Caffeine is:

Psychomotor stimulant and analeptic
Psychomotor stimulant
Analeptic
Cognition enhancer
Antidepressant.

Indications to use of caffeine are all, except:

Psychomotor excitement
Hypotension
Collapse
Oppression of respiration
Asthenia.

All, concerning caffeine, is true, except:

It has anxiolytic action
It is methylxanthine derivative
It has purinergic mechanism of action
It increases mental and physical performance
It has analeptic action.

Piracetam is:

Cognition enhancer
Adrenergic psychomotor stimulant
Purinergic psychomotor stimulant
Direct-acting analeptic
Indirect-acting analeptic.

Correct information, concerning adaptogens. is:

All listed
They improve adaptation
They stimulate immunity

They increase physical and mental performance
They enhance low blood pressure.

Pharmacological group for the treatment of depression is:

Antidepressants
Tranquilizers
Adaptogens
Sedatives
Actoprotectors.

Imipramine is:

Non-selective monoamines re-uptake inhibitor
Selective monoamines re-uptake inhibitor
Selective monoamine oxidase inhibitor
Non-selective monoamine oxidase inhibitor
Atypical antidepressant.

The main mechanism, by which amitriptyline increases the amount of catecholamines in the synapses, is:

Inhibition of neuronal re-uptake of catecholamines
An increase in catecholamines release from presynaptic membrane
An increase in catecholamines synthesis in presynaptic membrane
Prevention of catecholamines degradation in the synapse
Inhibition of monoamine oxidase.

Fluoxetine belongs to:

Selective serotonin re-uptake inhibitors
Non-selective monoamine re-uptake inhibitors
Selective norepinephrine re-uptake inhibitors
Selective monoamine oxidase-A inhibitor
Non-selective monoamine oxidase inhibitor.

A patient has severe depression co-existing with glaucoma. Antidepressant imipramine is contraindicated to him: What is the reason for this?

Peripheral antimuscarinic action
Antiadrenergic action
Antihistamine action
Antidepressive action
Thymoleptic action.

Therapeutic effect of antidepressants develops:

During 1-4 weeks from the start of treatment
Immediately after the start of treatment
During 1-4 hrs from the start of treatment
During 1-4 days from the start of treatment
During 1-4 years from the start of treatment.

Psychomotor stimulant with direct analeptic action is only:

Caffeine-sodium benzoate
Sydnocarb
Amphetamine
Camphor

Nikethamide.

Sydnocarb is used for the treatment of:

All listed

Asthenia after trauma and infection

Attention deficit in the children

Asthenia caused by neuroleptics

Asthenia caused by anxiolytics.

Analeptic action includes:

All listed

Stimulation of respiratory center in the brain medulla

Stimulation of vasomotor center in the brain medulla

Awakening effect

Convulsant effect.

Indications for analeptics' clinical use are all, except:

Inflammation

Collapse

Shock

Moderate suppression of respiration

Poisoning with central nervous system inhibitors.

Analeptic, which has anti-inflammatory and anti-allergic effects, is:

Etimizol

Nikethamide

Caffeine

Carbamazepine

Amphetamine.

One of the following statements, concerning nikethamide, is false:

It suppresses respiration

It is an analeptic

It has mixed action

It enhances low blood pressure

It stimulates respiratory center.

Sulfocamphocaine differs from camphor on its:

Solubility and routes of administration

Mechanism of action

Analeptic action

Indications in the urgent states

None of listed.

Nootropic drugs cause the following effects:

All listed

Improvement of new knowledge acquisition

Improvement of memory

An increase in brain stability to hypoxia

Improvement of cerebral blood circulation.

Cognition enhance by nootropic drugs relates to:

Stimulation of aspartate and glutamate receptors
Inhibition of central cholinoreceptors
Stimulation of central adrenergic receptors
Stimulation of serotonin receptors
Inhibition of aspartate and glutamate receptors.

Metabolic action of nootropics in the brain tissue manifests as:

All listed
Optimization of glucose metabolism
An increase in synthesis of macroergic compounds
An increase in synthesis of nucleic acids and proteins
Inhibition of lipids peroxidation.

All urgent states are the indications to use of piracetam, except:

Collapse
Stroke
Trauma of brain
Poisoning with neurotropic agents
Myocardial infarction.

False information concerning nootropics is:

They have many side-effects limited their use
They are used to treat cerebro-vascular accidents
They are administered intravenously for emergency help
They have neuroprotective action
They are taken orally for a long-term treatment.

False information concerning adaptogens is:

They have sedative action
They improve adaptation
They stimulate immunity
They increase physical and mental performance
They enhance low blood pressure.

Majority of adaptogens are:

Plant preparations
Synthetic preparations
Preparations from animal tissues
Obtained by biotechnology
Obtained from the microorganisms.

Main indications to use of Ginceng tincture are all, except:

Shock, collapse
Asthenia
Hypotension
Common adaptation syndrome
Sexual disturbances in men.

A patient had stroke in past. Which drug is necessary to include in the complex therapy in the order to improve mental performance?

Piracetam
Caffeine

Diazepam
Phenazepam
Amitryptiline

A child with retardation in mental development is prescribed piracetam for stimulation of educational process. What group is this preparation from?

Nootropic drugs
Antidepressants
Adaptogens
Analeptics
Psychomotor stimulants.

A patient with poisoning is unconsciousness. He has weak breathing and low blood pressure. Derivative of nicotinic acid was administered as analeptic. Which drug was used?

Nikethamide
Bemegrade
Camphor
Sulfacamphocaine
Caffeine.

Viral infection was complicated by impairment of breathing. Analeptic, relative to camphor, was administered intravenously to the patient. Which drug was used?

Sulfocamphocaine
Aethimizolum
Nikethamide
Cordiaminum
Bemegrade.

A patient with collapse was administered with directly-acting analeptic drug also known as purinergic psychomotor stimulant. What medication was used?

Caffeine-sodium benzoate
Codeine phosphate
Ephedrine hydrochloride
Atropine sulfate
Lobeline hydrochloride.

Antidepressant stimulating melatonin receptors is:

Agomelatine
Maprotiline
Fluoxetine
Pirazidol
Sertraline.

Depressive condition, which can be treated by ademetionine, is:

Secondary depression caused by liver diseases
Reactive depression
Involutional depression
Endogenous depression
Manic-depressive disorder.

Contraindications to use of fluoxetine:

Attempts of suicide

Depressions
Alcoholism
Appetite disorders
Pain syndromes.

A patient with depression complains of anxiety and insomnia. Which tri-cyclic antidepressant with sedative action can be used in this case?

Amitryptiline
Imipramine
Maprotiline
Fluoxetine
Pirazidol.

Young woman has anorexia caused by reactive depression. Fluoxetine use makes possible to overcome this appetite disorder. What kind of drug is fluoxetine?

Antidepressant
Anxiolytic
Adaptogen
Anorexigen
Appetizer.

Selective serotonin re-uptake inhibitors are not used together with monoamine oxidase inhibitors because of:

Serotonin syndrome
Re-turn syndrome
After-action
Postural hypotension
Cheese syndrome.

Only one preparation from the list is not used to treat depression:

Nikethamide
Amitryptiline
Imipramine
Maprotiline
Fluoxetine.

For emergence help in collapse and shock the following group of drugs is used:

Analeptics
Neuroleptics
Nootropics
Adaptogens
Actoprotectors.

Brain structure which is the main target for analeptics:

Medulla of brain
Basal ganglia
Reticular formation
Cerebellum
Cortex of brain.

Adaptogens are:

Natural preparations for improvement of adaptation and non-specific resistance

Synthetic preparations stimulating memory and education
Drugs for the treatment of collapse and impaired respiration
Drugs for the therapy of endogenous and reactive depression
Other than listed above.

Module 1. Lesson 11. Inotropic medicinal drugs. Cardiac glycosides. Anti-arrhythmic preparations

The following are correct, concerning dosage of cardiac glycosides, except:

Strophanthin is used in tablets, containing 0,25 of drug
Strophanthin is used in ampoules in form of 0,05% solution
Digoxin is used in tablets, containing 0,00025 of substance
Digitoxin is used in tablets, containing 0,0001 of drug per tablet
Digoxin is used in ampoules, containing 0,025% solution.

Cardiac glycosides exert the following hemodynamic effects in patients with congestive heart failure, except:

A decrease in kidney blood circulation
An increase in stroke volume
An increase in cardiac output
A decrease in venous pressure
A increase in kidney blood circulation.

Digitalis toxicity is characterised by following, except:

Dry mouth
Disturbance of colour vision
Hypokalemia
Heart block
Vomiting.

Only one digitoxin's characteristic is incorrect:

Efficacy in emergence
Slow developing effect
Good absorption from the gut
High ability to cumulate
Long action.

Acute heart failure is treated by:

Corglycon
Infusion from the herb of Adonis
Unithiolum
Digoxin (tablets)
Panangin.

Inotropic drugs are the agents, which:

Increase a force of heart contractions
Relax coronary blood vessels
Decrease oxygen demand of myocardium
Increase systemic blood pressure
Increase a heart rate.

Positive inotropic effect is:

- An increase in the force of systole
- Prolongation of diastole
- Deceleration of conductivity
- An increase in excitability of myocardium
- Slowing of the heart rate.

Cardiac glycosides produce the following changes in the ion transport in the cells of myocardium:

- A decrease of potassium influx and a decrease of sodium transport from the cell
- An increase of potassium entry and a decrease of sodium transport from the cell
- A decrease of calcium entry into the cell
- An increase in chlorides entry into the cell
- A decrease in sodium and chloride entry into the cell.

The most suitable preparation to treat chronic congestive heart failure is:

- Digoxin
- Corglyconum
- Strophantin
- Infusion of the herb of Adonis
- Quabain.

The early cardiac sign of digitalis toxicity is:

- Bradycardia
- Ventricular extrasystoles
- Tachycardia
- Relapse of heart failure
- Insomnia.

For restoration of the activity of sodium / potassium-ATPase it is used:

- Unithiolum
- Panangin
- Phenytoin
- Lidocaine
- Glucose.

The drug for emergency help in acute heart failure, caused by myocardial infarction, is:

- Dobutamine
- Adrenaline
- Noradrenaline
- Strophanthin
- Corglyconum.

All, concerning dobutamine, is true, except:

- It is a cardiac glycoside
- It is non-steroidal inotropic
- It is selective beta-adrenomimetic
- It improves coronary blood flow
- It is used in acute heart failure resistant to cardiac glycosides.

During digitalization a patient had headache, fatigue, nausea, color vision impairment, and bradycardia. What drug should be prescribed to relieve these symptoms of digitalis toxicity?

Unithiolum
Atropine
Naloxone
Neostigmine
Nikethamide.

A patient with the signs of acute heart failure is delivered to a hospital. Which drug should be included into the urgent therapy first of all?

Corglyconum
Digitoxin
Nikethamide
Adrenaline
Noradrenaline.

Myocardiosclerosis is accompanied by chronic heart failure. Digoxin is administered in small individual dose for maintenance of heart compensation. Which mechanism is responsible for its positive inotropic action?

Blockage of sodium / potassium ATP-ase
Blockage of phosphodiesterase III
Blockage of calcium channels
Activation of calcium channels
Stimulation of beta1-adrenergic receptors.

A patient with myocardial infarction displays cardiogenic shock. In this case dobutamine is the drug of choice. Which group is this remedy from?

Non-glycoside inotropics
Cardiac glycosides
Analeptics
Analgesics
Adrenoblockers.

A woman has pains in the heart, heart beats, and poor sleep. Cardionuerosis is diagnosed. Which cardiac glycoside with sedative properties is necessary to prescribe to the patient?

Infusion of the herb of Adonis
Strophanthin K
Sthrophantin G
Digoxin
Corglyconum.

Class I anti-arrhythmics exert their effect by the inhibition of:

Sodium channels
Potassium channels
Calcium channels
Chlorine ion channels
All types of ion channels.

An anti-arrhythmic of a Class IA is:

Quinidine
Propranolol
Verapamil
Digoxin
Lidocaine.

This drug is a Class II anti-arrhythmic agent:

Propranolol
Procainamide
Lidocaine
Diltiazem
Amiodarone.

A preparation from Class III anti-arrhythmics is:

Amiodarone
Lidocaine
Propranolol
Verapamil
Phenytoin.

This preparation belongs to Class IV anti-arrhythmics:

Verapamil
Quinidine
Propranolol
Lidocaine
Panangin.

A drug, effective in the termination of supraventricular, but not ventricular tachycardia, is:

Verapamil
Sotalol
Lidocaine
Trimecaine
Etacizin.

Adverse reactions, characteristic for lidocaine, are:

Hypotension, paresthesias, convulsions
Allergy, skin rash
Agranulocytosis, leucopenia
Extrapyramidal disorders
Spasm of bronchi, dyspepsy.

Class III anti-arrhythmics:

Block potassium channels and prolong repolarization
Block sodium channels and inhibit sodium influx
Block calcium channels of L-type
Block beta1-adrenoceptors and diminish Phase 4 depolarization
None of listed.

Course of the treatment with amiodarone (Class III anti-arrhythmic) must have “drug-free” interval every week because:

It has a half-life of 20-100 days
It is related structurally to thyroxine
It forms active metabolite which strengthen the action of the drug
It may cause reversible pulmonary fibrosis as a side-effect
It may cause corneal microdeposits.

Calcium channel blockers (Class IV anti-arrhythmics) are effective in:

All listed arrhythmias
Supraventricular tachyarrhythmia
Fibrillation of atria
Flutter
Paroxysmal tachycardia.

Drug for bradyarrhythmia is:

Atropine
Amiodarone
Anapilinum
Adrenaline
None of the listed.

Lidocaine is the drug of choice in:

Ventricular tachyarrhythmia
Supraventricular tachyarrhythmia
Bradycardia
Atrio-ventricular block
Heart arrest.

For emergency help in ventricular extrasystolia it is necessary to administer:

Lidocaine
Verapamil
Propranolol
Adrenalin
Atropine.

For emergency help in the attack of supraventricular tachyarrhythmia it is necessary to administer intravenously

Verapamil
Lidocaine
Adrenalin
Atropine
Dobutamine.

Inotropic drugs are divided into:

Cardiac glycosides and non-steroidal inotropics
Selective and non-selective preparations
Reversible and irreversible preparations
Long-acting and short-acting preparations
Opioid and non-opioid preparations.

For emergency help in acute heart failure it is necessary to administer intravenously

Corglyconum
Lidocaine
Propranolol
Adrenalin
Atropine.

Cardiac glycoside, used both in acute and chronic heart failure, is:

Digoxin
Sthrophantin
Corglyconum

Dobutamine.
Captopril.

Inotropic drugs are preparations which:
Improve myocardium contractility
Improve oxygen supply to myocardium
Decrease oxygen demand of myocardium
Increase myocardium resistance to hypoxia
Prevent atherosclerotic lesions in the heart.

Only one preparation in the list belongs to cardiac glycosides:
Digoxin
Dobutamine
Amiodarone
Propranolol
Procainamide.

Only one of the listed drugs has not anti-arrhythmic effect:
Dobutamine
Quinidine
Lidocaine
Procainamide
Amiodarone.

Cardiac glycosides block the exchange of the following ions through membranes of cardiomyocytes:
Sodium and potassium
Potassium and hydrogen
Calcium and potassium
Chloride and bicarbonate
Sodium and chloride.

Inotropics of indirect action are all drugs, except:
Cardiac glycosides
Angiotensin converting enzyme inhibitors
Angiotensin II receptor blockers
Peripheral vasodilators
Organic nitrates.

Module 1. Lesson 12. Medicinal drugs used for the treatment of patients with ischemic heart disease (antianginal drugs). Antihypertensive preparations. Hypolipidemic medicinal drugs

Cholestyramine lowers the level of cholesterol by:
Sequestering bile acids in the intestine
Prevention bile acids reabsorption
Blockage of cholesterol synthesis in the liver
Blockage of triglycerides synthesis in the liver
Activation of lipoprotein lipase.

Cough is the side-effect, which may accompany the use of:

Enalapril
Metoprolol
Nifedipine
Clonidine
Prazosin.

A drug, inhibiting de novo cholesterol synthesis, is:

Phenofibrate
Cholestyramine
Essentiale
Ezetimibe
Tocopherol acetate.

The calcium channel blocker for treatment of hypertension is:

Nifedipine
Nitroglycerine
Drotaverine
Papaverine
Enalapril.

In hypertensive emergency the drugs of choice are:

Clonidine and furosemide
Metyldopa and dichlothiazide
Reserpine and dichlothiazide
Propranolol and dichlothiazide
Strophanthin and furosemide.

In hypertensive emergency the drugs of choice are:

Papaverine and bendazole
Metyldopa and reserpine
Reserpine and dichlothiazide
Heparin and streptokinase
Strophanthin and furosemide.

In severe hypertensive crisis the drug for urgent treatment is:

Sodium nitroprusside
Clonidine
Metyldopa
Reserpine
Strophanthin.

Angioprotectors from the group of direct-acting antioxidants are used for treatment of:

Atherosclerosis
Chronic hypertension
Acute hypertension
Acute heart failure
Acute thrombosis.

Angioprotector from the group of direct-acting antioxidants is:

Tocopherol acetate
Simvastatin
Aspirin

Niacin
Etamzilate.

Blocker of cholesterol transfer in the intestine is:

Ezetimibe
Cholestyramine
Etamzilate
Simvastatin
Atorvastatin.

Potent vasodilator, realizing its effects through NO group, is:

Sodium nitroprusside
Papaverine
Drotaverine
Prazosin
Losartan.

A drug, realizing its effects through inhibition of angiotensin-converting enzyme, is:

Lisinopril
Losartan
Labetalol
Carvedilol
Prazosin.

Myotropic drug, lowering blood pressure through inhibition of phosphodiesterase III, is:

Papaverine
Propranolol
Sodium nitroprusside
Prazosin
Captopril.

Pharmacodynamics of angiotensin-converting enzyme inhibitors include all, except:

An increase of peripheral vascular resistance
Inhibition of angiotensin II formation
Elevation of bradykinine concentration in the blood
An increase in potassium concentration in the blood
Inhibition of aldosterone activity.

Drugs, realizing their antihypertensive effects through blockage of calcium channels, are:

Amlodipine and nifedipine
Papaverine and drotaverine
Dichlothiazide and furosemide
Prazosin and doxazosin
Captopril and enalapril.

Group of antihypertensive drugs, regulating water-electrolytes balance, is:

Diuretics
Beta-adrenoblockers
Alpha-adrenoblockers
Angiotensin II receptor blockers
Calcium channel blockers.

Antihypertensive drugs from the group alpha-adrenoblockers are:

Prazosin and doxazosin

Propranolol and bisoprolol

Dichlothiazide and furosemide

Verapamil and nifedipine

Lisinopril and enalapril.

Diuretics used in hypertension:

All listed

Decrease the volume of circulated blood

Reduce the edema of blood vessel wall

Reduce peripheral vascular resistance

Increase the sensitivity of blood vessels to other drugs.

Indications to use of labetalol are all, except:

Collapse

Chronic hypertension

Symptomatic hypertension

Acute hypertension

Pheochromocytoma.

Dry mouth is the side-effect, accompanied the treatment of hypertension with:

Clonidine

Metoprolol

Verapamil

Captopril

Losartan.

For emergence help in acute hypertension they use centrally acting adrenomimetic. This preparation is:

Clonidine

Metyldopa

Captopril

Enalapril

Sodium nitroprusside.

A patient has hypertension co-existing with tachyarrhythmia. Calcium channel blocker for his treatment is:

Verapamil

Nifedipine

Metoprolol

Labetalol

Captopril.

A patient has hypertension co-existing with angina pectoris. He is prone to bradycardia. Calcium channel blocker for his treatment is:

Nifedipine

Metoprolol

Labetalol

Magnesium sulfate.

A patient with hypertension is treated with captopril which causes dry cough as side-effect. This drug is from the group of:

- Angiotensin-converting enzyme inhibitors
- Angiotensin II receptor blockers
- Drugs influencing vasomotor centre
- Myotropic vasodilators
- Tiazide diuretics.

A patient is suffering from hypertension. His blood pressure was successfully controlled by monotherapy with adrenoblocker, but treatment was complicated with diarrhea and impotence. Which adrenoblocker can cause these side effects?

- Prazosin
- Metoprolol
- Bisoprolol
- Propranolol
- Clonidine.

Pentaminum was administered to the patient to relieve acute hypertension. What is the mechanism of this drug's effect?

- Blockage of N-cholinergic receptors in the ganglia
- Stimulation of alpha2-adrenoceptors in the vasomotor centre
- Stimulation of nitrate receptors in the blood vessels
- Blockage of angiotensin II receptors in the blood vessels
- Blockage of alpha1-adreceptors in the blood vessels.

A hypertensive patient was treated with the drug suppressing the formation of angiotensin II and preventing degradation of bradykinine. Point out the drug with such mechanisms of action:

- Enalapril
- Nifedipine
- Clonidine
- Reserpine
- Dichlothiazide.

A patient with initial form of hypertension complains of pain in heart and tachycardia. Which of the following drugs has to be used in the treatment of this patient?

- Propranolol
- Sodium nitroprusside
- Magnesium sulfate
- Papaverine
- Dichlorothiazide.

A patient was prescribed parenteral administration of clonidine (Clopheelinum) in sudden rise of arterial blood pressure. What is the mechanism of the drug's action?

- It stimulates central alpha2-adrenoreceptors
- It stimulates central imidazoline 1-receptors
- It blocks peripheral alpha1-adrenoreceptors
- It blocks both alpha1- and alpha2-adrenoreceptors
- It blocks N- cholinergic receptors of ganglia.

A patient with initial form of hypertension is prescribed with blocker of angiotensin II receptors. Which of the following drugs is used in the treatment of this patient?

- Losartan

Doxazosin
Drotaverine
Reserpine
Magnesium sulfate

Anti-atherosclerotic drug is prescribed to the patient with elevated level of cholesterol and triglycerides in his blood samples. This drug is vitamin, enhances lipoprotein lipase synthesis and decreases the level of triglycerides in the blood. What drug is prescribed?

Nicotinic acid
Atorvastatin
Simvastatin
Fenofibrate
Cholestyramine.

An old woman was diagnosed with cerebral atherosclerosis and hyperlipoproteinemia of II type. Cholestyramine was prescribed to her for the control of lipoproteins level. What is its mechanism of action?

It is bile acids sequestrant
It is inhibitor of cholesterol synthesis
It is a stimulant of peroxysome proliferator-activated receptor
It is an activator of lipoprotein lipase
It is direct-acting antioxidant.

A patient took 20 grams of hypolipidemic drug every day. In 2 months his treatment was complicated by constipation, and signs of vitamin A deficiency. Which hypolipidemic drug may cause such side-effects?

Cholestyramine
Simvastatin
Niacin
Fenofibrate
Tocopherol acetate.

A patient with diabetes mellitus has hyperlipoproteinemia of type II. Two years ago he had myocardial infarction. Angina attacks trouble him few times a week. Simvastatin was chosen as a drug for this patient. What is the regimen of its administration?

Orally once a day in the evening
Orally 3 times daily
Orally in a dose of 10,0-20,0
Orally in a dose of 0,25 once per 3 days
Intramuscularly once a day.

According to laboratory findings a patient with cerebral atherosclerosis has increased level of lipids peroxides in his blood. Which group of anti-atherosclerotic drugs should be used in this case?

Antioxidants
Hypolipidemics
Anti-platelets
Angioprotectors
None of listed.

The beneficial effects of nitrates in angina pectoris are all, except:
An increase in systemic blood pressure

Preload decrease
Afterload decrease
Relaxation of bigger coronary arteries
An increase in oxygen supply.

Nitroglycerine causes all listed side-effects, except:

Delay of atrio-ventricular conduction
Reflex tachycardia
Tolerance
Hypotension
Headache.

Long-acting nitrate is only:

Sustac
Nitroglycerine
Propranolol
Drotaverine
Nifedipine.

Nitroglycerine is used sublingually because:

It is quickly absorbed in oral cavity without hepatic first pass metabolism
It is not absorbed from the gut
It is destroyed by gastric juice
It interacts with components of the food
It is undergone hepatic first-pass metabolism.

Drug for emergency help in angina pectoris attack is:

Nitroglycerine
Propranolol
Verapamil
Amlodipine
Ivabradine.

Drugs for emergency help in angina pectoris attack are:

Nitroglycerine, Validol
Propranolol, Sustac
Verapamil, Digoxin
Validol, Sustac
Papaverine, Corvitol.

All, concerning Validol, is true, except:

It is used in hypertensive emergency
It is used to delay coronary spasm
It is menthol derivative
It has reflexive mechanism of action
It is taken sublingually.

An old man has pressing retro-sternal pain. The drug of choice to terminate such angina attack is:

Nitroglycerine
Nifedipine
Drotaverine
Papaverine

Molsidomine.

Emotional overstrain causes spasm of coronary vessels. Coronarolytic of reflexive action, used in this case, is:

Validolum
Dipyridamole
Papaverine
Molsidomine
Amlodipine.

Myocardial infarction is complicated by cardiogenic shock. The drug for emergency help is:

Dobutamine
Adrenalin
Noradrenaline
Strophanthin
Nitroglycerine.

A patient with angina pectoris is treated with calcium channel blocker. This preparation is:

Verapamil
Validolum
Mildronate
Corvitin
Isosobide dinitrate.

A patient with angina pectoris was prescribed with long-acting nitrate. This preparation is

Isosobide dinitrate
Nitroglycerine
Propranolol
Metoprolol
Nifedipine.

The strategy of treatment of angina pectoris includes:

All listed
A decrease in oxygen demand of myocardium
An increase in oxygen supply to myocardium
An increase in myocardium resistance to hypoxia
Improvement of energy processes in the myocardium.

Preparations, which decrease oxygen demand as well as increase oxygen supply to myocardium, belong to groups of:

Organic nitrates and calcium channel blockers
Beta-adrenoblockers and antioxidants
Beta-adrenoblockers and phosphodiesterase inhibitors
Organic nitrates and cardiac glycosides
Calcium channel blockers and non-glycoside inotropics.

A decrease of oxygen demand of myocardium by nitrates is due to:

Dilation of peripheral blood vessels and a decrease of the load on myocardium
Dilation of coronary arteries and delay of coronary spasm
Anti-platelet action and a decrease in the blood viscosity
Hypotension and reflexive tachycardia
Block of beta-adrenoceptors in the heart and a decrease in cardiac output.

An increase of oxygen supply to myocardium, caused by nitrates, is due to:

Dilation of coronary arteries

Anti-platelet action

A decrease of the load on myocardium

Relaxation of smooth muscles

Blockade of beta1-adrenoceptors in the heart.

Mechanism of nitroglycerine's action is connected with:

Activation of nitrate receptors

Blockade of calcium channels

Blockade of beta-adrenoceptors

Inhibition of phosphodiesterase III

Inhibition of adenosin desaminase.

Tolerance to nitroglycerine may be overcome by:

Free of nitrates interval (2-3 days)

An increase in the dose of nitroglycerine

Abolishing of the drug

Use of the supporting dose

Use of detoxification therapy.

An alternative drug to terminate angina attack is:

Nifedipine

Nitroglycerine

Amlodipine

Papaverine

Mildronate.

Antianginal effect of propranolol is explained by:

A decrease of the load on myocardium and reduction of oxygen demand

Dilation of coronary blood vessels

An increase of oxygen supply to myocardium

Dilation of peripheral blood vessels and redistribution of blood

Antihypoxic and antioxidant actions.

All, concerning drotaverine, is true, except:

It is highly effective coronarolytic

It is phosphodiesterase III inhibitor

It is more potent than papaverine

It is a spasmolytic

It has low toxicity.

“Stealing” syndrome, caused by drotaverine, is due to:

Redistribution of blood in the heart in a favor of normal area

Redistribution of blood in the body

Redistribution of blood in the heart in a favor of ischemic area

An increase in oxygen supply to myocardium

None of listed.

A patient felt retrosternal pain irradiating into the left arm. These signs are typical for angina attack. Which tablet should be taken sublingually as the first aid in this case?

Nitroglycerine
Propranolol
Metimazole
Sustac-forte
Thiotriazoline.

A man is diagnosed with angina pectoris. A physician advised him always to have tablets of nitroglycerine and take the drug in the first minutes of angina attack. From which group is this antianginal?

Organic nitrates
Calcium channel blockers
Adrenergic antagonists
Peripheral vasodilators
Antihypoxants.

Antianginal drugs are the preparations to treat:

Ischemic heart disease
Congestive heart failure
Acute heart failure
Chronic hypertension
Cerebral ischemia.

Calcium channel blocker for the treatment of angina pectoris is:

Nifedipine
Nitroglycerin
Molsidomine
Metoprolol
Propranolol.

Amlodipine is:

Calcium antagonist
Beta-adrenoblocker
Organic nitrate
Antihypoxant
Analgesic.

Myocardial infarction needs to use:

All listed groups of drugs
Opioid analgesics
Anticoagulants
Thrombolytics
Anti-arrhythmics.

Propranolol, prescribed to the patient with ischemic heart disease, is:

Non-selective beta-adrenoblocker
Cardio-selective beta-adrenoblocker
Organic nitrate
Calcium channel blocker
Metabolic corrector.

False information about verapamil is:

It is cardio-selective beta-adrenoblocker

It has both antianginal and anti-arrhythmic action
It is administered orally and intravenously
It blocks calcium channels of L-type
It is for prevention of angina attack.

Only one characteristics of drotaverine is false:
It is the most effective drug for termination of angina attack
It is not drug of choice in angina attack
It is myotropic coronarolytic
It improves oxygen supply to myocardium
It can be used to lower high blood pressure.

Only one group of the listed antianginal drugs can cause “stealing” syndrome:
Myotropic coronarolytics
Organic nitrates
Calcium antagonists
Beta-adrenoblockers
Coronarolytics of reflexive action.

Antianginal preparation of metabolic action which inhibits beta-oxidation of fatty acids by blocking 3-ketoacyl-coenzyme A thiolase:
Trimetazidine
Molsidomine
Metoprolol
Amlodipine
Nifedipine.

Telmisartan’s mechanism of action is a blockade of:
Angiotensin II receptors
Beta-adrenoceptors
Calcium channels
Alpha-adrenoceptors
Ganglionic N-cholinoreceptors.

Indications to use of labetalol are all, except:
Acute vascular insufficiency
Hypertensive disease
Hypertensive emergence
Symptomatic hypertension
Pheohromacytoma.

Module 2. Lesson 1. Medicinal drugs influencing function of respiratory organs. Anti-tussive preparations

Drugs for emergency help in suppression of respiration and respiratory arrest are:
Respiratory stimulants
Antitussives
Expectorants
Bronchodilators
None of listed.

Respiratory stimulants stimulate breathing by:
The action on respiratory centre in the medulla of brain
The action on smooth muscles in the bronchi
The action on the bronchial glands
The action on surfactant synthesis in the lungs
The action on the upper respiratory pathways.

The indication to use of codeine is:
Severe non-productive cough
Cough accompanied spasm of bronchi
Life-threatening cough
Severe productive cough
Cough with dense purulent sputum.

The use of codeine as antitussive is limited by its:
Abuse potential
Low potency
Central action
Analgesic activity
Tolerance.

Centrally acting non-narcotic antitussive is:
Glaucine
Codeine
Mucaltinum
Libexin
Acetylcysteine.

Glaucine may cause such side-effect as:
Hypotension
Dry mouth
Inhibition of breathing
Tolerance
Drug dependence.

Prenoxdiazin hydrochloride (Libexinum):
All listed
Is peripherally acting antitussive
Is like to local anesthetics on the mechanism of action
Is used in dry cough
Is low toxic.

Expectorants:
Decrease the viscosity of sputum
Directly act on respiratory center
Reflexly stimulate respiratory center
Decrease a cough
Dilate bronchi.

The main concept of expectorants use is:
To transform non-productive cough into productive one
To stop non-productive cough

To stop productive cough
To transform dense sputum into liquid one
To eliminate the spasm of bronchi.

All drugs belong to mucolytics, except:

Glaucine
Trypsin
Chymotrypsin
Acetylcysteine
Ribonuclease.

All concerning ambroxol is true, except:

It is a bronchodilator
It is an expectorant
It inhibits inflammation in the bronchi
It stimulates surfactant's synthesis
It is use to treat diseases accompanied by dry cough.

Acetylcysteine:

Is SH-containing drug; tears disulfide bonds in mucopolysaccharides of sputum
Is proteolytic enzyme; tears peptide connections in proteins of sputum
Is nuclease; depolymerises nucleic acids and reduces sputum viscosity:
Is centrally acting narcotic antitussive
Is peripherally acting non-narcotic antitussive.

Theophylline acts by:

Inhibition of phosphodiesterase
Inhibition of adenosine desaminase
Stimulation of adenylate cyclase
Stimulation of beta-adrenoceptors
Leukotriene antagonism.

Pharmacodynamics of theophylline is characterized by all, except:

Antianginal and anti-arrhythmic actions
Relaxation of smooth muscles in the bronchi
Dilation of pulmonary blood vessels
An increase in the tone of respiratory muscles
Improvement of lungs ventilation and saturation of the blood by oxygen.

Acute attack of bronchial asthma is treated by:

Salbutamol
Ipratropium bromide
Cromolyn sodium
Beclomethasone dipropionate
Ambroxol.

Pre-treatment of cromolyn-sodium blocks:

Allergen-induced bronchoconstriction
Pathogen-induced bronchoconstriction
Leukotriene-dependent mechanisms of bronchospasm
Receptor mechanisms of bronchospasm
None of listed.

Montelukast used in chronic treatment of bronchial asthma is:
Leukotriene receptor antagonist
Mast cell stabilizer
H1- histamine blocker
Anti-leukotriene modulator
Leukotriene synthesis inhibitor.

Drugs used in acute pulmonary edema are all, except:
Antitussives
Loop diuretics
Cardiac glycosides
Ganglia blockers
Antifoam drugs.

A patient with emphysema of lungs is suffering from persistent dry cough. A physician decided to prescribe him potent antitussive preparation from the group of opium alkaloids. Which drug should be prescribed?
Codeine phosphate
Glaucine hydrochloride
Butamirate citrate
Prenoxdiazin hydrochloride
Ipratropium bromide.

Patient's condition is characterized by cough, fatigue, wheezing, and slight degree of chills. He coughs out small amount of clear mucus. Acute bronchitis is diagnosed. Which expectorant may be proposed to this patient?
Acetylcysteine
Glaucine
Codeine
Prenoxdiazin
Ketotifen.

A patient is ill with chronic bronchitis. He employed the various treatment methods for bronchitis and considers that ambroxol facilitates cough better than other medicines. Which group is this preparation from?
Synthetic expectorant
Centrally-acting opioid antitussive
Centrally-acting non-opioid antitussive
Antitussive with peripheral action
Enzyme used as mucolytic.

A patient has bronchoectases and coughs out dense purulent sputum. Inhalations with trypsin made possible to decrease the viscosity of sputum and improved the drainage of bronchi. Which mechanism is a basis of mucolytic action of trypsin?
Restriction of peptide connections
Reflexive stimulation of bronchial secretion
Direct irritation of bronchial glands
Depolymerizing of acidic mucopolysaccharides
Depolymerizing of nucleic acids.

A child with bronchitis and peribronchial pneumonia was prescribed with syrup of ambroxol. The drug has transformed dry cough into productive one and improved lungs ventilation. Which effect of ambroxol, beside mucolytic action, is useful in this case?

- An increase in surfactant synthesis
- Alkalinization of bronchial liquid
- An increase in secretion of bronchial liquid
- An increase in synthesis of mucopolysaccharides
- An increase in protein synthesis.

Chronic bronchitis in 56-year-old patient is characterized by spasmodic component. Myotropic broncholytic was prescribed to the patient and successfully controlled bronchial function, but in few days tachycardia has occurred. Which drug may cause this adverse reaction?

- Theophylline
- Ephedrine
- Salbutamol
- Fenoterol
- Orciprenaline.

A woman has 1-2 asthma attacks per week. They are displayed as shortness of breath, wheezing, and chest tightness. She used short-acting selective beta-adrenoblocker for the control of these symptoms. Which preparation is this?

- Salbutamol
- Orciprenaline
- Isoprenaline
- Ephedrine
- Theophylline.

Mild persistent bronchial asthma is present in a patient. An oral leukotriene antagonist is recommended to the patient for prevention of attacks. What is this preparation?

- Montelukast
- Cromolyn sodium
- Ipratropium bromide
- Theophylline
- Beclomethasone.

Congestive heart failure was complicated by edema of lungs. Sodium nitroprusside and potent diuretic were included into the urgent treatment. What is the goal of their administration?

- A decrease of hydrostatic pressure in lungs vessels
- Elimination of bronhospasm
- Improvement of lungs ventilation
- Lowering of blood pressure
- Positive inotropic action.

Lobeline administered intravenously:

- Initiates breathing in the respiratory arrest
- Stimulates impaired respiratory centre
- Stimulates respiration in syncope
- Eliminates spasm of the bronchi
- Prevents bronchial asthma attack.

Reflexly acting irritant used as stimulant of respiration in syncope is:

- Solution of ammonia

Sulfocamphocaine
Lobeline
Salbutamol
Theophylline.

Etimizol used for stimulation of breathing in the newborn is:

Direct-acting analeptic
Mixed-acting analeptic
Reflexly-acting analeptic
Expectorant
Mucolytic.

Proteolytic enzymes used in the treatment of purulent diseases of bronchi are administered:

By inhalation
By intramuscular injection
By intravenous injection
Orally
Topically.

Ipratropium bromide prescribed for prevention of bronchial asthma attack is:

M-cholinoblocker
Beta-adrenomimetic
Mast cell stabilizer
Myotropic bronchodilator
Ganglionic blocker.

A patient with bronchial asthma of infective-allergic genesis uses inhalations of beclometasone dipropionate for prevention of attacks of bronchospasm. Which effect does this hormonal preparation displays in the bronchi?

Anti-inflammatory
Antitussive
Expectorant
Mucolytic
Spasmolytic.

Anticholinergic preparation for supporting therapy in chronic obstructive diseases of lungs is:

Thiotropium bromide
Orcprenoline sulfate
Fluticasone propionate
Cromolin-sodium
Ephedrine hydrochloride.

Berodual is:

Combined broncholytic drug, containing cholino- and adrenoblockers
Combined antitussive, containing codeine
Combined broncholytic, containing adrenoblocker and glucocorticoid
Combined antimicrobial, containing sulfa drug and trimetoprim
Combined anti-histamine, containing histaminoblocker and mast cell stabilizer.

M-cholinoblocker used as aerosol for the treatment of bronchial asthma:

Ipratropium bromide
Salbutamol

Orcprenaline sulfate
Fluticasone propionate
Cromolin-sodium.

Broncholytic of myotropic action is only:

Theophylline
Orcprenaline
Ephedrine
Acetylcysteine
Beclometasone.

Codeine is:

Centrally-acting narcotic antitussive
Centrally-acting non-narcotic antitussive
Peripherally-acting antitussive
Reflexly-acting expectorant
Stimulant of surfactant synthesis.

All drugs are used for control of the cough, except:

Beclometasone dipropionate
Codeine phosphate
Glaucine hydrochloride
Butamirate citrate
Prenoxdiazin hydrochloride.

Only one preparation can stimulate surfactant synthesis in the lungs:

Ambroxol
Salbutamol
Ketotifen
Atrovent
Mucaltinum.

Module 2. Lesson 2. Medicinal drugs acting on digestion. Drugs influencing appetite and function of gastric glands, the liver, the gall bladder, pancreatic gland, and intestine

A patient has hypoacidic gastritis. Drug combination for replacement therapy is:

Pepsin and hydrochloride acid
Trypsin and chymotrypsin
Trypsin and sodium bicarbonate
Pepsin and ascorbic acid
Pancreatin and hydrochloride acid.

Hyperacidic gastritis was treated with antacid, causing alkalosis and formation of gas in the stomach. This antacid is:

Sodium bicarbonate
Magnesium oxide
Sodium chloride
Magnesium sulfate
None of listed.

Strategy of pharmacotherapy of peptic ulcer disease includes all, except:

Inhibition evacuatory function of the stomach
Eradication of *Helicobacter pylori* through the use of antibiotics
Reduction of acid secretion
Protection of mucous membrane from the acid
Replacement therapy in acid hyposecretion.

Proton pump inhibitor for the treatment of gastric ulcer is:

Omeprazole
Famotidine
Pirenzepine
Pancreatin
Metoclopramide.

Ranitidine inhibits gastric secretion by the interaction with:

H₂ -histamine receptors
M-cholinoreceptors
Adrenoceptors
H₁-histamine receptors
Proton pump.

Only one of listed drugs is the inhibitor of potassium, proton - ATP-ase:

Lansoprazole
Pirenzepine
Misoprostol
Famotidine
Bismuth subcitrate.

All information concerning omeprazole is true, except:

It is laxative
It is potent inhibitor of gastric secretion
It is the inhibitor of proton pump
It inhibits basal and stimulated secretion in the stomach
It is taken orally, intramuscularly, or intravenously.

All diseases are the indications to use of proton pump inhibitors, except:

Chronic gastritis with hyposecretion of acid
Peptic ulcer disease
Gastro-esophageal reflux disease
Chronic gastritis with hypersecretion of acid
Zollinger-Ellison syndrome.

Preparation for prophylaxis of gastric juice aspiration in a surgery under the general anesthesia is:

Ranitidine
Atropine
Almagel
Sucralfate
Misoprostol.

Ulcer-healing effect of bismuth subcitrate is based on:

An increase in prostaglandins synthesis and anti-*Helicobacter* action
Acid neutralization

An increase in prostaglandins synthesis
Irradiation of *Helicobacter pylori*
Inhibition of proton pump.

Metoclopramide is prokinetic and anti-emetic, realizing its action by:

The antagonism to central D2-dopamine receptors
The inhibition of proton pump in the stomach
The blockage of H2- histamine receptors in the stomach
The blockage of prostaglandins receptors in the stomach
The antagonism to central serotonin receptors.

The treatment with non-steroidal anti-inflammatory drugs has been complicated by gastrophathy. H2-histaminic receptors blocker was prescribed to the patient. It has decreased the acidity of gastric juice, provided healing of erosions and reduced chronic gasro-intestinal bleeding. Which drug probably was used?

Famotidine
Omeprazole
Pirenzepine
Sucralfate
Bismuth subcitrate.

A patient is suffering from gastric ulcer at the stage of exacerbation accompanied by the increase of gastric juice acidity, pain, and dyspeptic syndrome. Omeprazole was prescribed to this patient. In few days, it reduced the pain and dyspepsia. Which mechanism is responsible for the effect of omeprazole?

Inhibition of proton pump
Blockage of M-cholinoreceptors
Blockade of H2-histaminic receptors
Neutralizing of gastric juice
Binding to prostaglandin receptors.

A patient complains of stomachache and heartburn. Laboratory investigation revealed the increase of gastric juice acidity. The diagnosis is: Gastritis with hypersecretion of acid. What should be prescribed to the patient for neutralization of acid in gastric juice?

Almagel
Omeprazole
Ranitidine
Drotaverine
Sucralfate.

A patient has peptic ulcer disease with pyloric localization of ulcer and hyperacidity of gastric juice. *Helicobacter pylori* has been detected in the samples of gastric contents. Which antimicrobial drug must be used for eradication of this microbe associated with peptic ulcer?

Metronidazole
Ranitidine
Famotidine
Almagel
Omeprazole.

Drug stimulating appetite is:

Tincture of Absinthium
Almagel

Sodium bicarbonate
Natural gastric juice
Pepsin.

Tincture of Absinthium is an appetizer with:
Reflexive action on the gastric secretion
Direct action on the gastric secretion
Direct action on the center of saturation
Indirect action on the salivation
None of listed.

Bitter for stimulation of appetite should be taken:
Before meals
During meals
After meals
At bedtime
At any time.

Drugs used to decrease appetite are:
Anorexigens
Appetizers
Antacids
Gastroprotectors
Hepatoprotectors.

Suppressors of gastric secretion include all drugs, except:
Histamine
Pirenzepine
Ranitidine
Famotidine
Omeprazole.

All preparations are antacids, except:
Hydrochloric acid
Sodium bicarbonate
Calcium carbonate
Magnesium hydroxide
Aluminium hydroxide.

Famotidine is a suppressor of gastric secretion from the group of:
H₂-histamine receptor blockers
Selective M-cholinoblockers
Non-selective M-cholinoblockers
Inhibitors of proton pump.
Other of listed.

Pirenzepine lowering gastric secretion by the blockade of:
M₁-cholinoreceptors in the stomach
All M-cholinoreceptors
H₂-histamine receptors
H₁-histamine receptors
All histamine receptors.

Almagel is:

- Non-absorbable antacid drug
- Absorbable antacid drug
- Covering drug
- Suppressor of gastric secretion
- Spasmolytic drug.

Antacid drugs are taken orally:

- Between meals and at bedtime
- Before and during meals
- Immediately after meals
- At any time of the day
- In the morning only.

Sucralfate:

- All listed
- Contains aluminium hydroxide residues
- Forms an ulcer-adherent complex
- Provides a barrier to diffusion of hydrogen ions
- Inhibits pepsin activity in gastric juice
- Is indicated in the short-term treatment of active ulcer.

Gasroprotective preparation with anti-helicobacter action is:

- Bismuth subcitrate
- Sucralfate
- Almagel
- Omeprazole
- Famotidine.

Incorrect indication to use of omeprazole is:

- Postoperative atonia of the stomach
- Peptic ulcer disease
- Gasatrosophagal reflux disease
- Chronic gastritis with hypersecretion of acid
- Zolinger-Ellison syndrome.

Emetic preparation of central action is:

- Apomorphine
- Ipecacuanna
- Diphenhydramine
- Chlorpromazine
- Domperidone

False statement about metoclopramide's mechanism of action is:

- It is selective blocker of M-cholinoreceptors
- It is specific blocker of D2-dopamine receptor
- It is serotonin antagonist
- It inhibits chemoreceptors of trigger zone
- It inhibits sensitivity of nerves translating impulses from pylorus and duodenum to emetic center.

Metoclopramide is used to treat:

All listed

Vomiting of different origin

Disturbances of the gut motility in dyspepsia

Reflux-esophagitis, gastro-duodenitis, peptic ulcer

Postoperative atonia of the stomach.

Misoprostol's systemic effect which limits its therapeutic utility is:

Risk of contractions of the gravid uterus

Promotion of mucus production

Inhibition of acid secretion

Improvement of trophism of gastric mucous membrane

Peptic ulcer healing.

Groups of the drugs prescribed as anti-emetics are all, except:

H₂-antihistamines

H₁-antihistamines

Neuroleptics

D₂-dopamine receptor antagonists

Serotonin-antagonists.

Prokinetics regulate:

Gastric motility

Gastric secretion

Acidity of gastric juice

Trophism of gastric wall

Gastric microflora.

Peripherally acting drug for the treatment of obesity is:

Orlistat

Amfepranone

Chlorpheniramine

Mazindol

Fenfluramine.

A patient was diagnosed with acute pancreatitis. The drug for decrease in proteolysis is:

Aminocaproic acid

Trypsin

Pancreatinum

Natural gastric juice

Hydrochloride acid.

Pharmacological management of disorders of intestinal motility includes:

All listed

Use of laxatives to treat constipation

Use of anti-diarrheal drugs to treat non-infectious diarrhea

Use of antimicrobials to treat diarrhea caused by infection

Use of cholinoblockers and spasmolytics to treat spasticity.

Laxative used to remove a poison from the intestine is:

Magnesium sulfate

Bisacodyl

Castor oil

Phenolphthalein
Senna preparation.

Laxatives are contraindicated in:
Abdominal complaints of unclear origin
Acute constipation
Chronic constipation
Prevention of straining at stool following surgery
Provision of relief in painful diseases of the anus.

Loperamide (Imodium) is:
An agent decreasing intestinal motility
Gastroprotector
Osmotic purgative
Gall stone dissolving drug
Stimulant of bile secretion.

All concerning loperamide is true, except:
It binds to opioid receptors in the brain
It is the anti-diarrheal of the first choice
It has high affinity to intestinal wall
It binds to opioid receptors in the wall of intestine
It decreases peristalsis and increases the tone of anal sphincter.

The drug preventing activation of proteolytic enzymes in the pancreatic gland is:
Contrykal
Pancreatin
Pepsin
Allocholum
Ademethionine.

Enzyme replacement therapy in chronic pancreatitis is achieved with:
Pancreatin
Contrykal
Pepsin
Natural gastric juice
Dialipon.

Main indication to use of Cholenzymum is:
Chronic cholecystitis
Ulcerative disease
Pancreatitis
Diarrhea
Acute cholecystitis.

Drugs used in hepato-biliary system disorders are:
All listed
Choleretics
Cholekinetics
Gall stone dissolving drugs
Hepatoprotectors.

Cholekinetics:

- Stimulate the gallbladder to contract and empty
- Stimulate production and secretion of liquid bile
- Dissolve cholesterol-containing stones
- Protect hepatocytes from aggressive factors
- Replace bile acids and enzymes.

A patient with biliary dyskinesia and constipation has been prescribed with magnesium sulfate, which stimulates the gallbladder to contract and empty. Which other effect of this drug, along side its cholekinetic action, is useful in this case?

- Laxative
- Sedative
- Antihypertensive
- Spasmolytic
- Diuretic.

A patient suffers from dyskinesia of intestines and bowels which displays as non-infectious diarrhea. Loperamide is opioid antidiarrheal of first choice in this case. Why is loperamide, contrary to other opioids, without central effects and narcotic properties?

- Due to high affinity to intestinal wall and intensive first-pass metabolism
- Due to high affinity to intestinal wall
- Due to low affinity to central opioid receptors
- Due to inability to absorption in the gut
- Due to antagonism to central opioid receptors.

A 5-year-old child has acute constipation caused by irrational diet. A pediatrician prescribed him castor oil. 15 milliliters of the drug were taken orally and within 2 hours the child started passing watery stool. What pharmacological group is this remedy from?

- Irritant laxatives
- Antidiarrheals
- Bulk laxatives
- Lubricant laxatives
- Spasmolytics.

A 45-year-old woman presents to the emergency room with severe epigastric pain. On the basis of patient's examination and laboratory findings acute pancreatitis is diagnosed. Which drug should be administered in this case?

- Contrykal
- Pancreatin
- Trypsin
- Mezym-forte
- Festal.

A patient suffers from calculous cholecystitis. Laboratory investigation shows that cholesterol-containing gallstones have been formed in his gallbladder. Ursodeoxycholic acid was recommended for long-term treatment of this patient. What is the goal of such recommendation?

- To dissolve cholesterol-containing gallstones
- To relax smooth muscles in the biliary system
- To increase cholesterol concentration in bile
- To stimulate a constriction of gall bladder
- To decrease cholesterol level in blood serum.

A patient is taken to emergency room with severe spastic abdominal pain. Intestinal colic is diagnosed. Which myotropic spasmolytic may be used for urgent aid?

Drotaverine
Atropine
Plathiphylline
Trimepiridine
Hexamethonium.

Bisacodyl is from the group of:
Large bowel irritant purgatives
Small intestine irritant purgatives
Osmotic purgatives
Lubricant laxatives
Bulk forming laxatives.

Agents decreasing intestinal motility are all, except:
Bisacodyl
Atropine
Plathyphylline
Hexamethonium
Drotaverine.

Preparations from Senna belongs to:
Anthraquinone derivatives
Synthetic preparations
Saline cathartics
Oils and parafins
Other than listed.

Loperamide is the antidiarreal preparation with:
Opioidergic action
Cholinergic action
Myotropic action
Astringent action
Covering action.

Anthraquinone derivatives produce discharge of soft stool in;
6-8 hours after the administration
0,5-3 hours after the administration
1-3 hours after the administration
Immediately after the administration
Few days after the administration.

Magnesium sulfate elicits bowel discharge:
1-3 hours after the administration
6-8 hours after the administration
0,5-3 hours after the administration
Immediately after the administration
Few days after the administration.

Magnesium sulfate used as laxative stimulates:
Mechanoreceptors in the intestine and bowel

Chemoreceptors in the intestine
Chemoreceptors in the bowel
Chemoreceptors in the trigger zone
None of listed.

Castor oil produces the discharge of watery stool:
0,5-3 hours after the administration
1-3 hours after the administration
6-8 hours after the administration
Immediately after the administration
Few days after the administration.

Active metabolite of castor oil (Oleum Ricini) irritating chemoreceptors in the intestine is:
Ricinoic acid
Aminocaproic acid
Chenodeoxycholic acid
Ursodeoxycholic acid
Hydrochloride acid.

Loperamide may cause all side-effects, except:
Loose stool
Allergic reactions
Weakness, headache, somnolence
Dyspepsia, nausea, vomiting
Ileus, meteorism, constipation.

Pancreatin is:
Combined enzyme preparation
Proteolytic enzyme
Inhibitor of proteolysis
Bile preparation
Hepatoprotective drug.

Combined preparation contains dry bile, extracts of Allium and Urtica, and activated charcoal. Beside the influence on bile secretion, it stimulates secretion and motility in the gut, normalizes microbial state. What is the name of the drug?
Allocholum
Cholenzymum
Essentiale
Siliborum
Festal.

Combined preparation contains essential phospholipids and vitamins. It protects liver tissue against hepatotoxic poisons, inhibits hepatic necrosis, promotes restoration of hepatocytes structure and functions. What is the name of this drug?
Essentiale
Allocholum
Cholenzymum
Siliborum
Tocopherol acetate.

Essentiale is used in:

All listed
Acute and chronic hepatitis
Cirrhosis, hepatic coma
Poisonings with hepatotoxic agents
Atherosclerosis.

For dissolving of cholesterol-containing gallstones the course of treatment by of chenodeoxycholic acid or ursodeoxycholic acid must be:

1-2 years
1-2 months
1-2 weeks
So long as it is possible
Of minimal duration.

Cholekinetics with spasmolytic action are all, except:

Ursofalc
Papaverine
Drotaverine
Platiphylline
Magnesium sulfate.

Ganglia blocking preparation for emergence help in the intestinal colic is:

Pentaminum
Atropine
Papaverine
Drotaverine
Procaine.

Drugs used to treat atonia of the intestine and bowel are:

All listed
Anticholinesterases
M-cholinomimetics
Agonists of serotonergic receptors
Agonists of motilin receptors.

Intestinal gas (meteorism) should be treated by:

Simethicone
Silimarín
Loperamide
Metoclopramide
Papaverine.

Serotonergic anti-emetic is:

Ondansetron
Simethicone
Loperamide
Metoclopramide
Essentiale.

All listed drugs are hepatoprotectors, except:

Bisacodyl
Heptral

Silimarin
Dialipin
Glutargin.

Probiotics:
Normalize microflora in the intestine and bowels
Neutralize acid in the gastric juice
Stimulate motility of the gut
Stimulate bile secretion and excretion
Replace pancreatic enzymes.

Module 2. Lesson 3. Drugs influencing renal function, tone and contractility of myometrium

Osmotic diuretics include:
Mannitol and urea
Torasemide and furosemide
Spironolactone and triamtrene
Acetazolamide and hydrochlorothiazide
Probenecid and Aethamidum.

Loop diuretics have profound diuretic action:
Because of the action on the ascending limb with large absorptive capacity
Because of producing of high osmotic pressure in primary urine
Because of the participation in synthesis of permeases in collecting tubules
Because of the action on energetic metabolism in the distal convoluted tubules
Because of the action on glomerular filtration.

Furosemide belongs to:
Loop diuretics
Osmotic diuretics
Thiazides
Potassium-sparing diuretics
Uricosuric agents.

The site of furosemide's action is:
Henle's loop
Distal convoluted tubules
Proximal convoluted tubules
Collecting tubules
All parts of nephron.

Therapeutic uses of furosemide include the following, except:
Hypokalemia
Acute pulmonary edema
Renal failure
Hypertension
Portal hypertension and ascitis.

Only one diuretic has paradoxal effect in diabetes insipidus:
Hydrochlorothiazide

Furosemide
Acetazolamide
Triamterene
Torasemide.

Mechanism of hydrochlorothiazide's action is connected with block of:

Potassium/sodium-ATP-ase
Carbonic anhydrase
Permease
Xanthine oxidase
Monoaminoxidase.

Potassium-sparing diuretic is only:

Spironolactone
Furosemide
Mannitol
Hydrochlorothiazide
Euphylline.

Correct statements, concerning spironolactone, are all, except:

It promotes the loss of potassium
It is metabolized to cannenone
It is an antagonist of aldosterone
It is used as adjunct to other diuretics to reduce the loss of potassium
It has anti-androgenic activity.

Group of diuretics, the most suitable in edema of brain or lungs, is:

Osmotic diuretics
Thiazides
Carbonic anhydrase inhibitors
Potassium-sparing diuretics
Diuretics from medicinal plants.

Group of diuretics, used for forced diuresis in acute poisonings, is

Loop diuretics
Thiazides
Carbonic anhydrase inhibitors
Potassium-sparing diuretics
Diuretics from medicinal plants.

Only one of the following agents promotes uric acid excretion:

Probenecid
Hydrochlorothiazide
Allopurinol
Acetazolamide
Spironolactone.

Allopurinol decreases the level of urates in the blood by:

A decrease in uric acid formation
An increase in urates excretion with urine
A decrease of uric acid reabsorption
An increase in uric acid utilization

Other way.

A patient with acute poisoning with barbiturate was admitted to emergency department. It known that poisonous substance is excreted by kidney. That's why forced diuresis is obligatory procedure in this intoxication. What drug is the best diuretic for forced diuresis?

Furosemide

Acetazolamide

Spironolactone

Triamterene

Hydrochlorothiazide.

A doctor recommended to a patient with essential hypertension to include into the treatment regimen a potassium-sparing diuretic, which is the antagonist of aldosterone and develops its therapeutic effect slowly. Which drug has been recommended to the patient?

Spironolactone

Strophanthin

Triamterene

Furosemide

Captopril.

A woman with heart failure and atrial fibrillation had pulmonary edema. Diuretic is obligatory component of the urgent treatment of this condition, but it is necessary to choose potent diuretic acting without the increase of the load on myocardium Which drug is the most suitable in the given situation?

Furosemide

Triamterene

Spironolactone

Mannitol

Acetazolamide.

In the postoperative period a patient with a cranial trauma is under the threat of brain edema. Intravenous infusion of mannitol made possible to eliminate this complication. Which group is this diuretic from?

Osmotic diuretics

Loop diuretics

Salturetics

Potassium sparing diuretics

Carbonic anhydrase inhibitors.

A woman is suffering from hypertension. Hydrochlorothiazide has been included into her treatment. With the time she addressed a doctor complaining of worsening of her condition. Hypokalemia was diagnosed. Which drug has to be added aiming at enhancement of diuretic effect and abolishing of hypokalemia?

Spironolactone

Mannitol

Furosemide

Indapamide

Dichlothiazide.

A hypertensive patient was fond of meat dishes and did not keep proper diet. In the course of complex antihypertensive treatment, including diuretic drug, an acute attack of gout has been developed. Which of the following agents is responsible for worsening of patient's condition?

Hydrochlorothiazide
Allopurinol
Spironolactone
Euphylline
Probenecid.

An old man is suffering from glaucoma. Along side eye drops containing pilocarpine, he was prescribed with diuretic drug acetazolamide. Which effect of this carbonic anhydrase inhibitor is the most important in this case?

Lowering of intraocular pressure
Diuretic effect
Lowering of intracranial pressure
Loss of bicarbonate
A decrease of pH in blood.

A 54-year-old woman consults her doctor complaining of a highly painful inflammation of the first metatarsophalangeal joint. Blood sampling shows hyperuricemia. The diagnosis is: Gout attack. Which drug may be used for acute attack of the gout?

Indomethacin
Paracetamol
Allopurinol
Probenecid
Urodanum.

A patient is a man of middle age. He has acute intermittent gout. For prophylaxis of gout attacks the diet low in purines and uricostatic allopurinol were prescribed to the patient. What is the mechanism of allopurinol's action?

It inhibits the synthesis of uric acid
It inhibits the reabsorption of uric acid
It promotes renal excretion of uric acid
It increases the solubility of urates
It prevents precipitation of urate crystals in the joints.

Drug for stimulation of labor activity is:

Dinoprost
Ergometrine maleate
Partusisten
Magnesium sulfate
Tractocile.

Drug for termination of postpartum bleeding is:

Ergometrine maleate
Dinoprost
Partusisten
Magnesium sulfate
Hexoprenaline.

Drug for prevention of premature labor is:

Partusisten
Dinoprost
Ergometrine maleate
Dinoproston

Oxytocin.

Oxytocin is:

Hormonal preparation for stimulation of labor activity

Prostaglandin for stimulation of labor activity

Ergot alkaloid for termination of postpartum bleeding

Opioid analgesic used in labor

Tocolytic from the group of vitamins preparations.

Oxytocin is contraindicated in:

Abnormal fetus position

Weak labor activity

Postpartum bleeding

Poor lactation

None of listed.

A precondition of effective use of oxytocin for stimulation of labor activity is:

Co-administration with estrogens

Co-administration with tocopherol acetate

Co-administration with progestins

Co-administration with androgens

Co-administration with ergot alkaloids.

Preparation administered intranasally to stop postpartum bleeding is:

Oxytocin

Ergometrine maleate

Dinoprost

Dinoprost

Calcium chloride.

Prostaglandins for stimulation of rhythmic contractions of the uterus are:

Dinoprost and dinoprostone

Oxytocin and carbetocin

Ergometrine maleate and methylergometrine

Partusisten and hexoprenaline

Neostigmine and castor oil.

Uterotonic, stimulated rhythmic contractions of myometrium in any term of the pregnancy, is:

Dinoprost

Oxytocin

Ergometrine maleate

Quinine

Carbetocin.

Dinoprostone as compared to dinoprost:

Has not adverse effects connected with spasms of smooth muscles

Does not belong to prostaglandins

Has more side-effects

Is not used for stimulation of labor activity

Is not indicated for initiation of abortion.

Tocolytics are:

Uterine relaxants

Drugs for stimulation of rhythmic contractions of myometrium

Drugs for the increase of myometrium tone

Drugs decreasing uterine cervix tone

Drugs for analgesia in labor.

Ergometrine maleate is:

Ergot alkaloid

Hormonal preparation

Prostaglandin

Synthetic uterus relaxant

Synthetic uterotonic.

Mechanism of action of ergometrine is connected with:

Alpha-adrenoceptors and serotonin-receptors

Alpha- and beta-adrenoceptors

M- and N-cholinoreceptors

Dopamine- and serotonin receptors

H1 and H2-histamine receptors.

Chronic poisoning with ergot alkaloids (ergotismus) is characterized by:

All listed

Vasoconstriction

Trophy disturbances

Psychic disorders

Convulsions.

Preparations, decreasing uterine cervix tone, are all drugs, except;

Castor oil

Atropine sulfate

Magnesium sulfate

Drotaverine

Lydasum.

For the prevention of preterm delivery a pregnant woman was administered with a medication, which is also known as anticonvulsant, antihypertensive, cholagogic and laxative drug. Contractions of the uterus and pain have stopped, smoothing effect has occurred. Which drug probably was used?

Magnesium sulfate

Fenoterol

Oxytocin

Ergometrine maleate

Hexoprenaline.

A young woman is gravida. The term of pregnancy is 20 weeks, but uterus tone is increased. It's necessary to prevent the development of rhythmic uterus contractions and to relax myometrium. Which adrenergic agonist can be used for this purpose?

Partusisten

Magnesium sulfate

Nifedipine

Aspirin

Tractocile.

During the labor uterus contractions are active, but the uterus cervix dilation is not enough. An obstetrician has decided to inject atropine sulfate to the woman. What is the goal of this drug administration?

- A decrease of uterine cervix tone
- Stimulation of uterus contractions
- An increase of uterus tone
- A decrease of uterus tone
- A decrease of hypoxia of fetus.

The second stage of labor is complicated by poor uterine contraction strength. Intravenous infusion of hormonal preparation has resulted in stimulation of uterus contractions and birth of the infant and placenta. Which hormonal preparation is indicated in this case?

- Oxytocin
- Neostigmine
- Ergometrine maleate
- Castor oil
- Quinine.

The third stage of labor was developed with complications. Placental expulsion has been managed actively and postpartum period was accompanied by slow involution of uterus. Which ergot alkaloid should be used for the increase of uterine tone and prevention of bleeding?

- Ergometrine
- Oxytocin
- Carbetocin
- Atropine
- Pabal.

A 36-year-old woman was admitted into maternity department. Her previous delivery has been by cesarian section. Now abnormal fetus presentation is diagnosed. Such condition often is complicated by non-coordinated uterine activity. What is your opinion about possibility to use of oxytocin in this parturient woman?

- It is absolutely contraindicated
- It is absolutely indicated
- It may be used after the full cervix dilation
- It may be used in the combination with other drugs
- It may be used under the good anesthesia.

Ultra-sound investigation has shown serious anatomic abnormalities of the fetus. Obstetrician together with pregnant woman and her husband have decided to abort the pregnancy. Which preparation can induce medical abortion in any term of pregnancy?

- Dinoprost
- Oxytocin
- Ergometrine maleate
- Quinine sulfate
- Castor oil.

Tocolytic tractocile is:

- An antagonist of oxytocin receptors
- A preparation of human oxytocin
- An agonist of oxytocin receptors
- Synthetic progestin

Selective beta2-adrenomimetic.

Carbonic anhydrase inhibitor is:

Acetazolamide (Diamox)

Furosemide (Lasix)

Chlorothiazide (Diuril)

Spiroinolactone (Aldactone)

None of listed.

Mechanism of action of spiroinolactone is realized:

Through interaction with hormonal receptors

Through osmotic effects

Through enzyme inhibition

Through block of ion channels

Through increased filtration.

Diuretic acting on specific membrane transport proteins is:

Triamterene

Lespenephрил

Toraseмide

Furosemide

Chlorothiazide.

Diuretic mechanism of action are:

All listed

Preventing water reabsorption\

Enzyme inhibition

Interaction with hormonal receptors

An increase of glomerular filtration.

Related preparations are:

Oxytocin and carbetocin

Oxytocin and dinoprost

Dinoprost and tractocil

Ergometrine and dinoprotone

Ergometrine and partusisten.

Module 2. Lesson 4. Drugs acting on the system of blood coagulation and fibrinolysis

Therapeutic uses of anti-platelet drugs include:

Prevention of secondary thrombosis

Acute thrombosis

Capillary bleeding

Hemorrhage

Leukemia

The following statement regarding hemostatics is correct:

Hemostatic sponge is used topically for termination of capillary bleeding

Heparin is given intravenously for epistaxis

Vikasolum is used topically as local acting hemostatic (stryptic)

Vikasolum is direct-acting coagulant for termination of bleeding

Eptacog-alpha is direct-acting anticoagulant

Heparin is an anticoagulant, which:

Binds with antithrombin III and inactivates clotting factors

Is effective orally

Is effective only in vivo

Is the antagonist of vitamin K

Is used to treat repeated bleedings.

Heparin:

Is used to treat acute thrombosis

Is effective only in the body

Has slow onset of action

Is not administered intravenously

Is used to treat capillary bleeding.

Heparin is an anticoagulant, which has all mechanisms of action, except:

A decrease of antithrombin III activity

A decrease in platelet aggregation

Inactivation of clotting factors

An increase in activity of lipoprotein lipase

A decrease in hialuronidase activity.

Warfarin:

Is an antagonist of vitamin K

Is effective parenterally

Is effective both in vitro and in vivo

Is rapidly acting anticoagulant

Inactivates thrombin in the circulation.

Warfarin can cause all side-effects, except:

Thrombus formation

Hematuria

Hemorrhage

Bleeding gums

Liver lesions.

Drugs for the treatment of acute thrombosis are:

Heparin and streptokinase

Vikasolum and novoseven

Validolum and nitroglycerine

Papaverine and magnesium sulfate

Aminocaproic acid and contrykal.

Heparin is an anticoagulant, which causes following side-effects, except:

Thrombosis

Bleeding

Hematuria

Osteoporosis

Thombocytopenia.

Enoxiparine is administered after the surgery. The purpose of its administration is:

Prevention of thrombosis
Termination of bleeding
Improvement of regeneration
Stimulation of fibrinolysis
Lysis of thrombus in the wound.

Anti-platelet, acting through the inhibition of cyclooxygenase-1 in blood platelets, is:

Aspirin
Clopidogrel
Dipyridamole
Ticlopidine
Pentoxifylline.

As compared to heparin, enoxiparine acts stronger on:

Activated Stuart-Prauer factor
Thrombin
Platelet aggregation
Lipoprotein lipase
None of listed.

An antagonist of heparin is:

Protamin sulfate
Contykal
Calcium chloride
Vikasolum
Eptacog-alpha.

Coumarin derivatives are:

The antagonists of vitamin K
Effective intravenously
Effective both in vitro and in vivo
Rapidly acting anticoagulants
Direct-acting anticoagulants.

In the overdose of indirect anticoagulants, it's necessary to use:

Vikasolum
Protamine sulfate
Hemostatic sponge
Eptacog alpha
Calcium chloride.

An activator of fibrinolysis with selective action on plasminogen bound to thrombus is:

Alteplase
Streptokinase
Contrykal
Fondaparinux
Rivaroxaban.

Inhibitor of fibrinolysis, using in surgeries on pancreatic, thyroid and large salivary glands, is:

Aminocaproic acid
Streptokinase
Heparin

Fondaparinux
Tenecteplase.

To stop bleeding caused by increased fibrinolysis, it's necessary to use:

Contrykal
Streptokinase
Alteplase
Tenecteplase
Enoxiparine.

Vikasolum is:

All mentioned
Indirect-acting coagulant
Participating in the hepatic synthesis of clotting factors
More suitable for prevention of bleeding
Administered orally and parenterally.

On discontinuation of heparin therapy in a patient with myocardial infarction, the administration of warfarin was started. What is the mechanism of anticoagulant effect of this preparation?

Inhibiting of pro-clotting factor synthesis in the liver
Blocking of calcium binding to clotting factors
Forming of complex with clotting factors
Breaking down of thrombin
Depolymerization of fibrin.

A patient with acute thrombosis of femoral artery was delivered to a hospital. Immediately infusion of heparin has begun. What is the goal of this drug administration?

To prevent further thrombus formation
To cause the lysis of thrombus directly
To transform plasminogen into plasmin
To prevent platelets activation
To decrease the area of hypoxia in tissues.

A patient with acute myocardial infarction was taken into resuscitation department 2 hours after the appearance of coronary thrombosis. Alteplase was administered by intravenous infusion. Which group is it from?

Activators of fibrinolysis
Direct anticoagulants
Indirect anticoagulants
Anti-platelets
Inhibitors of fibrinolysis.

A woman has redness of skin, pain, burning sensation, and tenderness in the area of shin. Laboratory analysis shows increased blood coagulation. A diagnosis is: Superficial thrombophlebitis. Ointment of heparin is prescribed to the patient. What kind of drug is it?

Non-fractionized heparin
Low molecular weight heparin
Antagonist of heparin
Fibrinolytic preparation
Anti-inflammatory agent.

Heparin therapy was complicated by macrohematuria and gastro-intestinal bleeding. Thrombocytopenia and prolongation of blood coagulation by 4 times are registered. Which preparation should be administered as heparin antagonist?

Protamine sulfate

Vikasolum

Fibrinogen

Aminocaproic acid

Calcium chloride.

A patient with prosthetic cardiac valve is prescribed with aspirin for prophylaxis of thrombus formation. The drug is recommended to be used in lower dose once per three days. Synthesis of which substance does aspirin inhibit in this case?

Thromboxane A₂

Prostacycline

Glycoprotein IIb/IIIa

Prothrombin

Anti-thrombin III.

Obstetrics pathology was accompanied by activation of fibrinolysis and uterine bleeding. Contrykal was administered by intravenous infusion and made possible to terminate hemorrhage. Which mechanism of drug's action is the most important in the given situation?

Inactivation of plasmin

Inhibition of trypsin activity

Inhibition of kinin-kallikrein

Inhibition of proteolysis

Inhibition of inflammation.

A young woman suffers from repeated nasal bleedings. She has low prothrombin index in her coagulogram. Which coagulant must be prescribed to this patient to improve the synthesis of pro-clotting factors in the liver?

Vikasolum

Calcium chloride

Fibrinogen

Thrombin

Aminocaproic acid.

An increase in the dose of warfarin was complicated by hematomas formation and hematuria. Prothrombin index is 30%. Which drug should be prescribed to avoid the signs of warfarin's overdose?

Phytomenadion

Contrykal

Protamine sulfate

Calcium chloride

Thrombin.

Liver surgery is accompanied by parenchymatous bleeding. Hemostatic sponge is used topically to stop this capillary bleeding. Which process is promoted by thrombin?

Conversion of fibrinogen into fibrin

Conversion of plasminogen into plasmin

Activation of pro-clotting factors II, VII, IX, X

Release of pro-clotting factors II, VII, IX, X

Clot retraction.

Salt hemostatic used both for prevention and termination of bleeding is:

Calcium chloride

Sodium chloride

Hemostatic sponge

Aminocaproic acid

Adrenalin hydrochloride.

Recombinant activated clotting factor VIIa is named:

Eptacog alpha

Alteplase

Tenecteplase

Enoxiparine

Etamzilat.

Etamzilat is angioprotective preparation for:

Prophylaxis and treatment of capillary bleeding

Prophylaxis and treatment of bleeding from bigger vessels

Prevention of hemorrhage caused by increased fibrinolysis

Prophylaxis and treatment of thrombus formation

Prophylaxis and treatment of thrombophlebitis.

Indications to use of phlebotropic drugs are:

Venolymphatic failure

Acute venous thrombosis

Venous bleeding

Prevention of bleeding

Prevention of thromboembolism.

Escusan and detralex belong to:

Venotonic systemic drugs

Venotonic drugs for topical use

Anti-platelet preparations

Activators of fibrinolysis

Anticoagulants of direct action.

Rivaroxaban is:

Direct factor Xa inhibitor for prophylaxis of thromboembolism

Non-fractionized heparin for prophylaxis of thromboembolism

Low molecular weight heparin for prevention of thrombus formation

Recombinant clotting factor VIIa for treatment of bleeding

Selectively acting activator of plasminogen for dissolving of thrombus.

Excessive anticoagulant effect in bleeding due to warfarin can be reversed by:

Large doses of vitamin K

Stopping the drug

Factor IX concentrates

Protamine sulfate

Diuretics.

Fibrolytic drugs are all, except:

Ribonuclease

Streptokinase
Alteplase
Tenecteplase
Urokinase.

Coagulation factor that is the main target of heparin:

Thrombin
Fibrinogen
Proaccelerin
Christmas factor.
Antihemophilic globulin.

Calcium chloride is:

Direct-acting coagulant
Indirect-acting anticoagulant
Pro-clotting factor
Fibrinolytic drug
Inhibitor of fibrinolysis.,

Rivaroxaban is:

Orally active direct factor Xa inhibitor
Low molecular weight heparin
Factor Xa inhibitor for subcutaneous administration
Unfractionated heparin
Phlebotropic preparation.

Module 2. Lesson 5. Hematinics. Immune modulators. Anti-cancer drugs

Combined anti-anemic preparation is:

Ferroplex
Ferrous sulfate
Ferum Lek
Folic acid
Cyanocobalamin

Side-effect of ferrous preparations in the oral cavity is:

Dark spots on the teeth
Allergic stomatitis
Hunter's glossitis
Candidiasis
Caries.

The following information, regarding iron therapy is true, except:

Iron preparations are not taken by mouth
Laboratory response is seen within one week after starting of therapy
Injectable forms of iron are used when oral iron therapy is ineffective
Ascorbic acid increases absorption of iron in the gut
Oral iron therapy may cause constipation and dark color teeth.

Immune stimulating drug from the group of leucopoiesis stimulants is:

Sodium nucleinate

Sodium chloride
Ferrous sulfate
Ferrum Lek
Folic acid.

The main idea of anti-cancer chemotherapy is:
Cytostatic action and inhibition of tumour growth
Antimicrobial action and prophylaxis of infection
Anti-allergic action and prevention of anaphylaxis
Stimulation of immunity
Stimulation of regeneration.

Methotrexate is used to treat breast cancer. Its mechanism of action is:
Antagonism with folic acid
Intercalation
Alkylating action
Disturbances in metaphase of mitosis
Disturbances of asparagine metabolism.

Vincristin is used to treat lymphoma. It belongs to:
Mitotic poisons
Antimetabolites
Intercalating drugs
Alkylating agents
Enzymes.

Asparaginase, administered to the patient with acute leukemia, is:
Enzyme
Antimetabolite
Anti-cancer antibiotic
Alkylating agent
Alkaloid.

All drugs are used to treat malignant tumours and leukemia, except:
Methyluracilum
Chlorbutinum
Mielosanum
Cyclophosphanum
Fltioruracilum.

Leucopoiesis inhibitors may cause:
All listed
Leucopenia
Necrotic lesions of mucosa
Alopecia
Vomiting.

Long cyanocobalamin treatment was prescribed to the patient with megaloblastic anemia developed after gastrotomy. A drug was injected intramuscularly. What advantage does the parenteral way have over the enteral?
It is effective in the absence of gastromucoprotein
It provides drug fast elimination

It provides drug fast absorption
It provides long circulation of the drug in the blood
It prevents inactivation of the drug in the liver.

Ferrous preparation for oral administration in hypochromic anemia is:

Ferrous sulfate
Cyanocobalamin
Folic acid.
Tardyferon
Deferoxamine.

Iron from medicinal drug in the body is transported by:

Transferrin
Transcortin
Appoferritin
Ferritin
Hemosiderin.

After the use of oral forms of ferrous preparations improvement of laboratory parameters begins:

In 5-7 days
Immediately
In 5-7 minutes
In 5-7 hours
In a month or more.

Parenteral administration of ferrum lek may be complicated by all side-effects, except:

Dark spots on the teeth
Face hyperemia
Retrosternal pain
Hypotension
Shock-like reaction.

True statement concerning epoetin-beta is:

It is glycoprotein stimulating proliferation of erythroid cells
It is combined ferrous-cobalt-containing preparation
It is ferrous preparation for elimination of iron deficiency
It is cobalt preparation for increase in erythropoietin synthesis
It is for conversion of megaloblastic erythropoiesis into normoblastic one.

Most suitable agent for the treatment of hypochromic anemia in patients with renal failure is:

Epoetin-beta
Ferrum Lek
Ferrous sulfate
Tardyferon
Cyanocobalamin.

Drugs for the treatment of hyperchromic megaloblastic anemia are:

Cyanocobalamin and folic acid
Ferrous sulfate and coamid
Ferrous sulfate and hydrochloride acid
Ferrous sulfate and ascorbic acid
None of listed.

Anti-anemic action of cyanocobalamin is based on:

Its co-operation with folic acid in the synthesis of purine and pyrimidine nucleotides

Its participation in the absorption of iron in the gut

Its participation in the synthesis of hemoglobin

Stimulation of erythrocytes saturation by hemoglobin

Its influence on the central nervous system.

Folic acid is:

Additional remedy in the therapy of megaloblastic hyperchromic anemia

Basic preparation in the therapy of iron-deficit hypochromic anemia

Basic preparation in the therapy of megaloblastic hyperchromic anemia

Basic preparation in the therapy of aplastic anemia

Additional remedy in the therapy of iron-deficit hypochromic anemia.

A patient has pale skin and mucous membranes, weakness, tachycardia. Total count of red blood cells is decreased. Colored index is 0,76. It is known that he has gastritis with lower acidity of gastric juice. What is correct diagnosis and basic preparation for the therapy?

Iron-deficient anemia, ferrum lek

Hemolytic anemia, prednisolone

Anemia due to chronic renal failure, epoetin

Hemochromatosis, deferoxamine

Megaloblastic anaemia, cyanocobalamin.

A patient has glossitis, disturbances of sensation and movements, erythropenia, leucopenia, thrombocytopenia and megaloblastic cells in his blood. A diagnosis is: Megaloblastic anemia. What is the basic preparation for this kind of anemia?

Cyanocobalamin

Ferrous sulfate

Ferrum Lek

Folic acid.l

Ascorbic acid.

A young man with acute blood loss was admitted to surgical department. His hemoglobin was low. Ferrum Lek administered intravenously made possible to restore hemoglobin's level in few days. What is the goal of its administration to this patient?

Compensation of acute ferrous deficit

Stimulation of erythropoiesis

Transformation of megaloblastic erythropoiesis into normoblastic one

Termination of bleeding

Inhibition of fibrinolysis.

A patient with polycythemia is treated by sodium phosphate containing radioactive phosphor in special clinic. Which group is this preparation from?

Erythropoiesis inhibitors

Erythropoiesis stimulants

Drugs acting on blood coagulation

Drugs acting on fibrinolysis

Leucopoiesis stimulants.

Beside the stimulation of leucopoiesis, Methyluracilum improves:

Regeneration

Erythropoiesis
Synthesis of macroergic compounds
Lipids metabolism
Bones mineralization.

Indications to use of Methyluracilum are all, except:

Leukemia
Leucopenia
Wounds with poor regeneration
Chronic inflammations
Low non-specific resistance.

Filgrastim is used to treat:

Neutropenia caused by anti-cancer drugs
Lymphocytic leukemia
Myelocytic leukemia
Lymphoma
Lymphopenia.

Leucopoiesis inhibitors are used in all diseases, except:

Leucopenia
Leukemia
Collagenosis
Autoimmune diseases
Cancer.

A patient has leucopenia of un-known etiology. Count of white blood cells in his blood samples is decreased. Counts of red blood cells and platelets are normal. Which group of drugs, acting on hemopoiesis, must be used in this case?

Leucopoiesis stimulants
Erythropoiesis stimulants
Erythropoiesis inhibitors
Leucopoiesis inhibitors
Anti-cancer drugs.

A woman is suffering from the trophic ulcer. Surgical processing of the ulcer and eradication of purulent microflora were performed. After that ointment of Methyluracilum was prescribed for topical use. What is the goal of this prescription?

Stimulation of regeneration
Stimulation of leucopoiesis
Stimulation of specific immunity
Stimulation of non-specific resistance
Local abolishing of pain.

A patient has necrotic lesions of mucous membrane in the oral cavity and throat. They have developed on the ground of neutropenia caused by incorrect use of chloramphenicol. Human colony stimulating factor is administered to this patient for normalizing of hemopoiesis. What is the name of the drug?

Filgrastim
Epoetin-beta
Sodium nucleinate
Pentoxilum

Methotrexate.

A child was diagnosed with acute lymphocytic leukemia. Leucopoiesis inhibitor methotrexate is included into the combined therapy of this child according to standard protocol. What is the mechanism of action of this drug?

Antagonism with folic acid

Intercalation

Alkylation

Microtubules inhibition

Inhibition of lymphoid tissue proliferation.

Patient's condition is characterized by weakness, enlargement of spleen and an increase of white blood cells count with a prevalence of myelocytes and myeloblasts. A diagnosis is: Chronic myeloid leukemia. Which alkylating agent should be used to treat relapse of the disease?

Myelosan

Methotrexate

Vinblastin

Adriamycin

Prednisolone.

Leucopoiesis inhibitors and anti-cancer drugs are:

Immune depressants

Immune modulators

Substitutes of immune system components

Stimulants humoral immunity

Stimulants of cell immunity.

Immune modulating drugs include:

All listed

Thymus preparations

Interferons and interleucins

Regulatory peptides

Bacterial preparations.

Clinical uses of immunosuppressive drugs:

All listed

Organ transplantation

Hemolytic disease of the newborn

Autoimmune disorders

Collagenic diseases.

Clinical uses of interferon as immunomodulating agent:

All listed

Cancer treatment

Multiple sclerosis

HIV infection

Septic conditions.

Structural analog (antimetabolite) that is cytotoxic immunosuppressive drug:

Azathioprine

Vincristine

Cyclophosphamide

Prednisolone
Sodium nucleinate.

Anti-anemic preparation, containing iron polyisomaltosate, is named:
Ferrum Lek
Ferrous sulfate
Ferrous lactate
Tardyferon
Cyanocobalamin.

Iron preparation used both orally and parenterally:
Ferrum Lek
Ferrous sulfate
Tardyferon
Folic acid
Epoetin beta.

Module 2. Lesson 6. Vitamins preparations. Antivitamins

Processes with the participation of ascorbic acid are all, except:
Resorption of bone tissue
Synthesis of glucocorticoids
Synthesis of catecholamines
Absorption of iron
Synthesis of procollagen.

Indication for usage of ergocalciferol is:
Rickets
Hemeralopia
Neuritis
Bleeding gums
Anemia.

If the level of calcium is normal, ergocalciferol has following effects, except
Stimulation of bones resorption
Stimulation of calcium absorption in the gut
Stimulation of calcium re-absorption in the kidney
Inhibition of bones resorption
Supporting of calcium level in the blood.

Only one preparation is active form of vitamin:
Cocarcboxylase
Retinol acetate
Riboflavine
Ribonuclease
Thiamine chloride.

Ascorbic acid participates in:
Synthesis of procollagen
Synthesis of vision purple
Synthesis of keratohyalin

Absorption of calcium
Resorption of bone tissue.

Antioxidant vitamin is:
Tocopherol acetate
Retinol acetate
Thiamine bromide
Folic acid
Nicotinic acid.

Only one drug is co-enzymic vitamin preparation:
Riboflavine
Retinol acetate
Ascorbic acid
Ergocalciferol
Rutin.

Hypervitaminosis may develop under the incorrect dosage of:
Ergocalciferol
Thiamine chloride
Cyanocobalamin
Folic acid
Tocopherol acetate.

A baby has signs of rickets: weakness, hypotonia, bone deformations. This baby must be treated with:
Ergocalciferol
Retinol acetate
Tocopherol acetate
Ascorbic acid
Nicotinic acid.

The old woman has angular stomatitis, dermatitis on the face and conjunctivitis. Vitamin preparation suitable in this case is:
Riboflavin
Nicotinic acid
Ascorbic acid
Thiamine chloride
Pyridoxine hydrochloride.

Hypovitaminosis in a patient is characterized by dermatitis, diarrhea and dementia characteristic for pellagra. Preparation for replacement therapy is:
Nicotinic acid
Riboflavin
Ascorbic acid
Thiamine chloride
Pyridoxine hydrochloride.

Vitamin deficiency is characterized by weakness, bleeding gums, hypochromic anemia, which are the signs of scurvy. Preparation for replacement therapy is:
Ascorbic acid

Riboflavin
Nicotinic acid
Thiamine chloride
Pyridoxine hydrochloride.

Vitamin deficiency is characterized by megaloblastic anemia, glossitis, neurological disturbances. Preparation for replacement therapy is:

Cyancobalamin
Rutin
Nicotinic acid
Ascorbic acid
Thiamine chloride

Hypovitaminosis is characterized by peripheral neuritis and congestive heart failure. Preparation for replacement therapy is:

Thiamine chloride
Nicotinic acid
Ascorbic acid
Folic acid
Calcium pangamate.

A patient, who has a mastectomy because of the mammary gland cancer, is prescribed a course of radiotherapy. What vitamin drug has anti-radiation effect caused by antioxidant activity?

Tocopheroli acetat
Cyanocobalaminum
Ergocalciferolum
Riboflavinum
Vikasolum.

A 39-year-old man appealed to a hospital. Recently he noticed susceptibility to infectious diseases and impairment of twilight vision. During the examination a doctor diagnosed hyperkeratosis. What vitamin drug should be prescribed?

Retinoli acetat
Pyridoxini hydrochloridum
Riboflavinum
Ergocalciferolum
Tocopheroli acetat.

A patient came to a doctor with complaints of twilight adaptation impairment (night blindness). What vitamin drug is to be prescribed to the patient for the restoration of his vision?

Retinoli acetat
Thiamini chloridum
Vikasolum
Pyridoxini hydrochloridum
Tocopheroli acetat.

Patient's blood analysis revealed megaloblasts and a high color index. The diagnosis is megaloblastic anemia. What drug should be prescribed to the patient?

Cyanocobalaminum
Calcii panthotenas
Acidum nicotinicum
Pyridoxini hydrochloridum

Acidum ascorbinicum.

Membrane-tropic vitamins are all, except:

Nicotinic acid
Retinol acetate
Tocopherol acetate
Ergocalciferol
Ascorbic acid.

Specific vitamins therapy is:

Use of vitamin to treat hypovitaminosis
Use of vitamin in diseases unconnected with vitamin deficit
Use of vitamin for improvement of adaptation
Use of vitamin to treat hypervitaminosis
Use of ultra-high doses of vitamins.

All statements concerning antivitamins are true, except:

Ascorbinase improves bioavailability of vitamin C
Neodicumarinum is an antivitamin of naphthoquinon
Isoniazid is an antivitamin of pyridoxine
Methotrexate is an antivitamin of folic acid
Thiaminase destroys vitamin B1.

Specific indication for usage of ergocalciferol is:

Rickets
Hemeralopia
Polineuritis
Scurvy
Megaloblastic anemia.

Neurotropic effect of thiamine includes:

All listed
Improvement of impulses conduction in nervous fibers
A decrease of pain in the nerves
Ganglia blocking action
Stimulation of acetylcholine synthesis.

Thiamine chloride is indicated in diabetes mellitus due to its:

Synergic action with insulin
Neurotropic effect
Dilation of coronary blood vessels
Normalization of heart rate
All mentioned.

Vitamins, participating in tissue respiration, are:

Riboflavin and nicotinic acid
Thiamine and calcium pantothenate
Ascorbic acid and rutin
Cyanocobalamin and folic acid
Pyridoxine and calcium pangmate.

Vitamin, which decreases side-effects of anti-tubercular drugs and oral contraceptives, is:

Pyridoxine hydrochloride
Thiamine chloride
Calcium pantothenate
Nicotinic acid
Folic acid.

Pyridoxine hydrochloride is used for replacement vitamins therapy in:

None of listed
Beri-beri
Megaloblastic anemia
Pellagra
Ariboflavinosis.

Neurotropic action of cyanocobalamin mainly is due to synthesis of:

Myelin
Dopamine
Gamma-amino-butyric acid
Glutaminic acid
Keratohyalin.

Vitamins, participating in purine and pirimidine nucleotides synthesis, are:

Folic acid and cyanocobalamin
Ascorbic acid and rutin
Nicotinic acid and riboflavin
Retinol and ergocalciferol
Pantothenic acid and thiamine.

Multi-vitamin drugs are suitable for:

Both adaptation therapy and prophylaxis of hypovitaminosis
Replacement vitamins therapy
Pharmacodynamic vitamins therapy
Adaptation vitamins therapy
Prophylaxis of hypovitaminosis.

Multi-vitamin drugs should be dosed exactly because they contain:

Vitamins A and D
Vitamins of B-complex
Vitamins-antioxidants
Vitamins in very high doses
Vitamins in the doses according to their daily requirement.

Retinoid for the treatment of leukemia is:

Tretinoin
Etrretinate
Acitretin
Isotretinoine
Retinol acetate.

A patient has severe form of psoriasis accompanied by arthropathy. He is prescribed with synthetic retinoid for oral administration. This preparation is:

Acitretin
Tretinoin

Isotretinoine
Retinol acetate
Tocopherol acetate.

Phytomenadion is indicated to patients:
In all listed situations
With hemorrhagic syndrome
With overdose of indirect-acting coagulants
With hemorrhagic side-effects of salicylates and other drugs
Before surgeries for prevention of blood loss.

Calcitriol belongs to:
Preparations of vitamin D active metabolites
Natural vitamin D preparations
Structural D2 analogs
Natural vitamin A preparations
Synthetic retinoids.

Active form of vitamin D is;
Calcitriol
Ergocalciferol
Acitretin
Tretinoin
Cholecalciferol.

Preparations related to retinol are:
Tretinoin and isotretinoine
Calcitriol and calcidiol
Ascorbic acid and rutin
Cyanocobalamin and folic acid
Thiamine and cocarboxylase.

Common properties of ascorbic acid and tocopherol acetate:
Antioxidant action
Water solubility
Lipid solubility
Regulation of collagen synthesis
Tocolytic action.

Vitamin preparation synergic to ascorbic acid in the decrease of blood vessel wall permeability:
Rutin
Folic acid
Nicotinic acid
Thiamine chloride
Cyanocobalamin.

Water soluble vitamin used as eye drops is:
Riboflavin
Rutin
Retinol acetate
Ergocalciferol
Phytomenadion.

Module 2. Lesson 7. Hormonal preparations. Anti-allergic and anti-inflammatory drugs

A patient has polyuria, polydipsia, and high level of glucose in the blood. The diagnosis is: Insulin dependent diabetes mellitus. Which hormonal preparation should be used for replacement therapy?

Humulin
Desmopressin
L-thyroxin
Thyamazole
Prednisolone.

A child has low growth, obesity, low body temperature, and retardation in mental development. The diagnosis is: Hypothyroidism. Which hormonal preparation will be used for replacement therapy?

L-thyroxin
Actrapid
Glibenclamide
Glucagon
Metformin.

A woman has restlessness, increased body temperature, tachycardia, and enlargement of thyroid gland. The diagnosis and preparation for anti-hormonal therapy are:

Hyperthyroidism and thyamazole
Diabetes mellitus and regular insulin
Diabetes insipidus and desmopressin
Hypothyroidism and thyreocomb
Osteoporosis and calcitrin.

A 45-year old patient has type II diabetes mellitus. Oral hypoglycemic drug for his treatment is:

Glibenclamide
Insulin glargine
L-thyroxin
Parathyroidin
Prednisolone.

A 57-years old patient has insulin independent diabetes mellitus and obesity. Hypoglycemic drug from the group of biguanides for him is:

Metformin
Glibenclamide
Repaglinide
Glucagon
Acarbose.

A 25-year old patient has type I diabetes mellitus. Hormonal drug for his treatment is:

Protaphane
Glibenclamide
Metformin
L-thyroxin
Prednisolone.

Insulin therapy is complicated with hypoglycemic coma. Hormonal preparation for urgent administration is:

Glucagon
Glucose
Humulin
Monotard
Metformin.

Diabetes mellitus is displayed with hyperglycemic coma. Insulin preparation for urgent administration is:

Actrapid
Glucose
Adrenalin
Prednisolone
Glucagon.

Diabetic coma has been diagnosed. Concentration of sugar in blood is 18.44 millimol / Liter. What drug with glucose decreasing effect should be prescribed to this patient?

Insulin of short action
Insulin of prolonged action
Insulin of intermediate action
Biguanide derivative
Sulfanylurea dervative.

The condition of a patient with diabetes worsened after a routine injection of insulin. There was anxiety, cold sweat, tremor of limbs, general weakness, and loss of consciousness. What drug is pharmacological antagonist of insulin?

Adrenalini hydrochloridum
Coffeinum-natrii benzoas
Noradrenalini hydrotartras
Glibenclamidum
Metforminum.

An endocrinologist has prescribed glibenclamide to a patient with type II diabetes mellitus. What is the basic mechanism of this drug action?

Stimulation of insulin secretion by beta-cells of Langerhans' islets
Increasing of glucose metabolism
Depression of gluconeogenesis
Enhancement of glucose capture by peripheral tissues
Activation of glucose transport into the cell.

Type II diabetes was revealed during an examination of elderly patient. What drug is expedient for use in this case?

Glibenclamidum
Dexamethasonum
Desoxycorticosteroni acetat
Levothyroxinum
Thyamazolum.

A patient with hypothyroidism was treated with a drug – synthetic sinistrorotatory thyroxin isomer. The following concomitant complications are possible: tachycardia, arrhythmia, trembling of the limbs. Which of the listed drugs has such action?

Levothyroxinum
Retabolilum
Prednisolonum
Tamoxifenum
Progesteronum.

A child from endemic region with low iodine level in the environment has is hypothyroidism. Which combined preparation, containing thyroid hormone and iodine, should be used in this case?

Thyreocomb
L-thyroxin
Thyamazole
Thyroliberin
Sodium iodide.

For the last month, a patient had increased thirst with a preference for extremely cold water and increased urine output. The level of the sugar in the blood was normal. Diabetes insipidus has been diagnosed. Which drug must be used in this patient?

Desmopressin
Oxytocin
Somatotropin
Follitropin alpha
Danazol.

Oral hypoglycemic drugs are:

Non-hormonal preparations for type II diabetes
Hormonal preparations for type II diabetes
Insulin preparations for type I diabetes in young patients
Long-acting insulins for type I diabetes in elderly patients
Preparations for the treatment of diabetic coma.

Hypothalamic hormonal preparations used in ovulation dysfunction in women are:

Buserelin and triptorelin
Somatotropin and somatostatin
Octreotide and lanreotide
Desmopressin and terlipressin
Oxytocin and desaminoxytocin.

Replacement hormonal therapy is:

The use of hormonal drug for hypofunction of endocrinal gland
The use of hormonal drug for diseases unconnected with hormones deficit
The use of non-hormonal properties of hormones
The use of anterior pituitary hormones for stimulation of peripheral glands
The use of anti-hormonal preparations.

Pharmacokinetics of regular insulin (actrapid) is characterized by all, except:

It is completely absorbed in the gut
It is administered subcutaneously and intravenously
It starts to act in 15 minutes
It has duration of action of 4-6 hrs
It is inactivated by insulinase in the liver and kidneys.

Insulin preparations belong to the group of:

Pancreatic hormones
Pituitary hormones
Thyroid hormones
Adrenal steroids
Gonadal hormones.

Principles of the therapy with hormonal preparations are:

All listed
Individual dosage
Long-term treatment
Gradual abolishing
Stimulation therapy at the end of treatment.

Oxytocin, adiurecrin and their analogs are:

Peptide hormonal preparations from the posterior pituitary
Peptide hormonal preparations from the anterior pituitary
Peptide hormonal preparations from the hypothalamus
Peptide hormonal preparations from the pancreatic gland
Steroidal hormonal preparations from the adrenal cortex.

Somatotropin is:

Morphogenic hormone
Kinetic hormone
Anabolic hormone
Catabolic hormone
None of listed.

Hormonal preparation from glucocorticoids group is

Hydrocortisone acetate
Desoxycorticosterone acetate
Testosterone propionate
Clomiphene citrate
Progesterone capronate.

Prednisolone exerts all effects, except:

Hypoglycemia
Catabolism of proteins
Hyperglycemia
Inhibition of inflammation
Suppression of immunity and allergy.

Hormonal preparation with mineralcorticoid activity is:

Desoxycorticosterone acetate
Dexamethasone
Triamcinolone
Testosterone propionate
Estradiol benzoate.

Glucocorticoids may cause all side-effects, except:

Hypotension
Hyperglycemia

Osteoporosis
Ulcer of the stomach
Hypokalemia.

Glucocorticoids exert:
Anti-inflammation
Immune stimulation
Increased resistance to infection
Improvement of regeneration
Promotion of wound healing.

Hormonal therapy of collagenosis is complicated with gastric ulcer, hypertension, and hypokalemia. There are side-effects of:

Glucocorticoids
Thyroid hormones
Hypoglycemic drugs
Anabolic steroids
Gonadal hormones.

Hormonal therapy of myopathy in young woman is complicated with increased body weight and masculinization. There are side-effects of:

Anabolic steroids
Glucocorticoids
Thyroid hormones
Antidiabetic drugs
Estrogens.

Hormonal preparations used for urgent administration in anaphylaxis, shock, and hypoglycemia belong to:

Glucocorticoids
Mineralcorticoids
Anabolic steroids
Estrogens
Progestins.

A woman appealed to a doctor with a complaint of pain in her knee joint. The diagnosis is: Acute arthritis. What drug from corticosteroids group can be administered into the joint?

Hydrocortisone
Aminoglutethimide
Desoxycorticosterone
Ethinylestradiol
Dydrogesterone.

A patient with rheumatoid arthritis had been taking glucocorticosteroid during several weeks. Then he suddenly stopped taking the drug. What complication can occur in this case?

Withdrawal syndrome
Hyperglycemia
Hypertension
Exacerbation of chronic infection
Formation of ulcers in the stomach

Because of long-term use of the drug such complications as osteoporosis, ulcer of the stomach, edema, an increase of arterial pressure, and insomnia have developed. Laboratory tests detected hypernatremia, hypokalemia and hyperglycemia. What drug has been applied?

Prednisolonum

Digoxinum

Hypothiazidum

Indometacinum

Reserpinum.

Having serious infection a patient needs an anabolic drug for the improvement of appetite. Which one?

Retabolilum

Heparinum

Thiamini chloridum

Tinctura Absinthii

Acidi folicum.

A medicine was prescribed for the treatment of arthritis. It increases the production of lipomoduline, reduces phospholipase A2 activity, reduces the synthesis of arachidonic acid metabolism products (cyclic endoperoxides, prostaglandins). What drug is this?

Dexamethasonum

Adrenalini hydrochloridum

Glibenclamidum

Indomethacinum

Diclofenac sodium.

A patient has traumatic shock. Beside other measures, steroidal hormonal preparation is used for urgent treatment of this condition. What drug is mentioned?

Dexamethasone

Testosterone propionate

Clomiphene citrate

Metyrapone

Finasteride.

Use of prednisolone ointment in the treatment of mycotic exema results in the generalization of infection. Which pharmacological effect of topically used glucocorticoid is probable cause of this complication?

Immune suppressive

Anti-inflammatory

Anti-allergic

Catabolic

Hyperglycemic.

A patient complains of general weakness and darkening of skin. Blood pressure is low. Laboratory investigation shows eosinophilia, hyponatraemia, and hypoglycemia. The diagnosis is: Hypocorticism. Which hormonal preparation is necessary to use for replacement therapy together with glucocorticoid?

Desoxycorticosterone acetate

Spironolactone

Methyltestosterone

Stanozol

Flutamide.

A young boy is body builder. He plans to use retabolil for the increase of skeletal muscles mass. The sportsman needs to know: how does this anabolic steroid influence male reproductive function:

It inhibits spermatogenesis and potency

It stimulates male reproductive function

It reduces secondary sex characteristics

It produces feminization

It does not influence male reproductive system.

A 19-year old girl has short stature, stunted breast growth, and amenorrhea. Objective examination and results of hormones testing made possible to diagnose the primary hypogonadism. Which drug should be used for stimulation of sexual development of this young female?

Estradiol dipropionate

Testosterone propionate

Nandrolone phenylpropionate

Clomiphene citrate

Oxyprogesterone caproate.

A 63-year-old female patient has been treated surgically for breast cancer and has received a course of chemotherapy. Tamoxifen was prescribed to the patient as discontinuation of previous therapy. Which group is the drug from?

Anti-estrogens

Adrenal steroids

Anabolic steroids

Androgens

Estrogens.

A woman is suffering from dysmenorrhea: pain during menstruation is severe and interferes with her daily activities. Sometimes dysmenorrhea co-exists with menorrhagia. Which preparation from the group of female hormones can be used for this condition?

Dydrogesterone

Estrone

Estradiol dipropionate

Climonorm

Mefipristone.

Glucocorticoids are used in bronchial asthma due to their:

Anti-allergic properties

Immune suppressive properties

Anti-shock properties

Catabolic action

Hyperglycemic action.

Anabolic steroids differ from androgens in such properties:

More potent anabolic activity and residual androgenic action

More potent sexual activity

More potent catabolic activity

More potent anabolic activity

Decreased androgenic activity.

Mechanism of action of all steroidal hormones is connected with:

- Binding to intracellular cytoplasmic receptor
- Binding to membrane receptors
- Binding to nuclear receptor
- Regulation of glucose transport into the cell
- None of listed.

Indications to clinical use of nandrolone deconoate (Retabolil) are all, except:

- Cushing's syndrome and hirsutism
- Cachexia and asthenia
- Wounds and ulcers
- Bone fractures and osteoporosis
- Myopathy and dystrophy of optic nerves.

Estrone (folliculin):

- All listed
- Takes part in female sexual development
- Maintains the proliferation phase of menstrual cycle
- Increases uterus sensitivity to oxytocin and acetylcholine
- Stimulates calcium transport and causes reduction of cholesterol level in blood.

Drugs for replacement therapy in menopause in women (postmenopausal hormone therapy) belong to:

- Estrogens
- Androgens
- Progestins
- Anabolics
- Corticosteroids.

Progesterone:

- Decreases uterus sensitivity to oxytocin and supports development of pregnancy
- Increases uterus sensitivity to oxytocin
- Is used to treat primary amenorrhea
- Is contraindicated in dysfunctional uterine bleeding and endometriosis
- Can not cause acne, hirsutism, and depression.

Main classes of oral contraceptives are:

- All listed
- Combination pills containing estrogen and progestin
- Progestin pills
- Progestin implants
- Postcoital contraceptive.

A woman appealed to a doctor with a complaint of pain in the knee joints. During examination the doctor revealed swelling, reddening, hyperthermia in these joints area. Laboratory tests showed positive acute phase reactants. What drugs have to be used for the treatment of the patient?

- Anti-inflammatory agents of non-steroid structure
- Narcotic analgesics
- Antidepressants
- Antibiotics
- Sulfonamides.

A 62-years-old man has been suffering from coxitis for a long time. A doctor prescribed him a new non-steroid anti-inflammatory agent celecoxib. It improved the patient's state. What is the advantage of this drug?

Selective blockade of cyclooxygenase-2

Depression of choline esterase

Depression of phosphodiesterase

Activation of adenylate cyclase

Activation of phosphodiesterase

Allergic dermatitis produces itching, hypostasis, reddening, and insomnia. What drug is expedient for prescribing to the patient?

Dimedrolum

Phenobarbitalum

Nitrazepamum

Chlorali hydras

Natrii oxybutyras.

A patient has urticaria, which is treated with dimedrol. Which element of allergy pathogenesis is the therapeutic effect of dimedrol connected with?

Interaction of histamine with receptors in the organs

Synthesis of immunoglobulins

Histamine secretion

Formation of the antigen-antibody complex

Activation of B-lymphocytes.

For treatment of arthritis a physician prescribed a drug which belongs to non-steroid anti-inflammatory medicines. It mainly influences cyclooxygenase-2. It has no irritative influence on the mucous membrane of the digestive system. What drug is it?

Celecoxibum

Indometacinum

Diclofenac-natrium

Acidum acetylsalicylicum

Ibuprofenum.

A second generation antihistamine drug is a derivative of piperidine, taken once a day. It has no M-anticholinergic and adrenergic blocking effect. It shows anti-allergenic, anti-exudative, and antipruritic action. What drug is this?

Loratadinum

Retinoli acetat

Dimedrolum.

Diazolinum

Suprastinum.

Biguanides advantages are:

All listed

Does not increase body weight

Does not cause hypoglycemia

Used in patients with refractory obesity

Used in patients with insulin resistance

Receptor mediating retention of water by adiurecrin and desmopressin:

Vasopressin (V2) receptor
Alpha-adrenergic receptor
Beta-adrenergic receptor
Cholinergic receptor
Other than listed.

Complications of insulin treatment which are secondary to hypoglycemia:

All listed
Tachycardia
Tremor
Palpitations
Hunger.

To achieve anti-inflammatory action adrenal corticosteroids disturb:

Phospholipase A reaction
Cyclooxygenase reaction
Lipid peroxidation
Microsomal oxidation
All mentioned reactions.

Synthetic analogue of gonadotropin-releasing hormone for the treatment of prostate cancer :

Buserelin
Protirelin
Octreotide
Lanreotide
Follitropin beta.

Module 2. Lesson 8. Antiseptics and disinfectants. Sulfonamides. Fluorquinolones and other synthetic antibacterial preparations. Antifungal drugs

The drug for treatment of purulent wounds is

0,02% solution of nitrofurazone
70% solution of ethyl alcohol
5% alcohol solution of iodine
40% solution of formaldehyde
5% solution of potassium permanganate.

Nitrofurazone (Furacilinum) is characterized by all, except:

It is disinfectant
It is antiseptic
It is bactericidal to gram-positive and gram-negative pathogens
It is inhibiting enzymes participating in carbohydrate metabolism
It has low allergic potential and low toxicity.

Hydrogen peroxide is characterized by the following, except:

It is antiseptic-halogen
It is quickly decomposing
It causes foaming
It is used for removal of necrotic matter from the wound
It oxidizes proteins in microbes.

Phenol is characterized by all, except:

It is chemotherapeutic agent

It is organic substance

It is disinfectant and antiseptic

It is protoplasmic poison

It is a standard for comparing other germicides.

The following statements concerning disinfectants are correct, except:

They are used to kill pathogens inside of human body

They are used to kill pathogens on the inanimate objects

They have wide spectrum of anti microbial activity

They exert bactericidal effect

They are stable in the environment.

To process the burn surface a surgeon uses the antiseptic from oxidizers group. It is:

Potassium permanganate

Hydrogen peroxide

Chlorhexidine bigluconate

Chloramine B

Phenol.

Detergent, containing chlorine, is used to process surgical area and surgeon's hands. This antiseptic is:

Chlorhexidine bigluconate

Potassium permanganate

Hydrogen peroxide

Chloramine B

Iodocerin.

Antiseptic from dyes group was prescribed to treat pyoderma. This preparation is:

Brilliant green

Hydrogen peroxide

Alcohol solution of iodine

Potassium permanganate

Hydrogen peroxide.

Antiseptic from dyes group was prescribed for gargling. This preparation is:

Ethacridine lactate

Brilliant green

Iodine alcohol solution

Boric acid

Salicylic acid.

Nitrofurazone (Furacilinum) alcohol solution is used for external otitis. The drug belongs to:

Nitrofur derivatives

Antiseptics-detergents

Sulfonamides for local use

Phenol derivatives

Antiseptics from medicinal plants.

To prepare an operative field a doctor used a dichlorinated biguanid derivative. It is the most active local antiseptic, shows fast and strong bactericidal action on Gram-negative and Gram-positive bacteria. What drug is this?

Chlorhexidini bigluconas

Furacilinum

Viride nitens

Chloraminum

Acidum boricum.

For processing of burn surface of the patient's skin a specific drug was used. Its antiseptic properties are provided by free oxygen that reacts with organic substances. What drug is this?

Kalii permanganas

Furacilinum

Chlorhexidini bigluconas

Acidum boricum

Natrii hydrocarbonas.

The mechanisms of antiseptic action are:

All listed

Oxidation of bacterial protoplasm

Denaturation of bacterial proteins

An increase in cell membrane permeability

Inhibition of SH- groups of enzymes.

Detergent action is meaning:

A decrease of surface tension

Oxidizing of proteins

Chlorination of proteins

Sedimentation of proteins

An increase of surface tension

Dyes are:

Active against staphylococci and streptococci

The most potent antiseptics

Highly active disinfectants

Active against pathogenic fungi and viruses

Chemotherapeutical agents.

Incorrect information about concentration of antiseptics is:

30% solution of hydrogen peroxide is for processing of wounds

70% solution of ethyl alcohol is for processing of surgical area

96% solution of ethyl alcohol is for processing of surgical tools

3% solution of hydrogen peroxide is for processing of wounds

2% solution of boric acid is for gargling.

Phenol is the most active as:

Aqueous solution

Alcohol solution

Oil solution

Crystals

None of listed.

Antiseptic with mummifying properties is only:

Formaldehyde

Phenol

Ethyl alcohol

Boric acid

Salicylic acid.

Mechanism of action of antiseptics from the line of heavy metals is:

Blockage of SH-groups of enzymes

Oxidizing of proteins

An increase of cell membrane permeability

Inhibition of dehydrogenase

Dehydration of cells and proteins.

Highly toxic metallic salt used as disinfectant is:

Mercury dichloride

Silver nitrate

Cupper sulfate

Zinc sulfate

Mercury oxide.

Antiseptic from medicinal plant is:

Chlorophyllipt

Nitrofurazone

Ethacridine

Chlorhexidine

Decamethoxine.

Antiseptics with astringent or cauterizing action on the macroorganism are:

Salts of heavy metals

Acids and alkalis

Alcohols and aldehydes

Tars and resins

Dyes and nitrofurazone derivatives.

A child has thermal burn of the hip. Antiseptic from oxidizers group in the form of 5% solution was used to process the burn surface. Which antiseptic was used?

Potassium permanganate

Hydrogen peroxide

Ethacridine lactate

Chlorhexidine bigluconate

Brilliant green.

Antimicrobial agent containing chlorine is used for disinfection of patient's sputum. This preparation is chloramine B. Which concentration of its solution is suitable in this case?

3-5%

0.25-0.5%

0.5-1%

70%

95%.

A patient uses antiseptic-detergent, containing chlorine, for treatment of trophic ulcer. Repeated use of the drug has been complicated by dry skin around the pathological area. What preparation has such side-effect?

Chlorhexidine

Chloramine B

Decamethoxine

Ethonium

Solution of ammonia.

Highly toxic preparation from aromatic line was used for disinfection. Work with this substance demands protective measures because the drug can absorb through the skin. Which aromatic derivative is mentioned?

Phenol

Resorcinol

Ichthyol

Birch tar

Thymol.

Silver nitrate is used as antiseptic, but taking inside it produces chemical damage of oral mucosa and common intoxication. Which solution can you propose for inactivation of this agent on the mucous membranes in oral cavity and stomach?

2 % solution of sodium chloride

0.5% solution of potassium permanganate

5% solution of potassium permanganate

3% solution of hydrogen peroxide

2 % solution of boric acid.

A patient has chronic tonsillitis caused by streptococcal microflora. Solution of ethacridine lactate is prescribed to him for gargling. Which group is this antiseptic from?

Dyes

Nitrofurans

Detergents

Aliphatic compounds

Aromatic compounds.

A patient has skin ulcer on the shin. Analysis of exudation shows the presence of staphylococci. To treat this ulcer a surgeon prescribed oil solution of plant preparation containing chlorophyll from the leaves of eucalypt. Which drug is prescribed?

Chlorophyllipt

Chloramine B

Chlorhexidine

Novoimaninum

Nitrofurazone.

Combined iodine preparation used for processing of lesions of oral mucosa is:

Iodicerin

Iodine tincture

Brilliant green

Methylene blue

Ethacridine lactate.

Main principles of the chemotherapy are:

All listed

Choice of a drug according to its spectrum of action

Choice of a drug according to the sensitivity of microbes

Supporting of chemotherapeutic concentration

2-3 days of treatment after the normalization of body temperature.

Principles of the chemotherapy include all, except:

Use of minimal doses of chemotherapeutics

Choice of the drug according to its spectrum of action

Replacement of basic drug by the alternative preparation after the development of microbes' resistance

Supporting of chemotherapeutic concentration

Allergic test at the start of treatment.

Sulfonamides:

Act by the competitive inhibition of para-amino-benzoic acid utilization

Are bactericidal

Act by the inhibition of cell wall synthesis

Cause antiseptic action

Can be used together with procaine.

The following is the basis for sulfamethoxazole and trimetoprim combination:

Both drugs have nearly similar plasma half-life

Both drugs act on the same stage of folates metabolism

Both drugs are bacteriostatic agents

A combination has less side-effects than every drug itself

A combination has long duration of action.

Ultra-long acting sulfonamide is:

Sulfalen

Sulfacetamide sodium

Sulfadimethoxine

Sulfadimezine

Salazopyridazine.

Sulfacetamide sodium (Sulfacylum-natrium) belongs to:

Sulfonamides for local use

Antiseptics

Antibiotics

Long-acting sulfonamides

Fluorquinolones.

Sulfonamide used as eye drops is:

Sulfacetamide sodium

Sulfadimethoxine

Ciprofloxacin

Furazolidone

Nitrofurantoin (Furadoninum).

A combination of sulfonamide and trimetoprim is:

Co-trimoxazole

Nitroxolin

Sulfadimethoxine
Nalidixic acid
Furazolidone.

The following statement, concerning Co-trimoxazole (sulfamethoxazole and trimetoprim combination), is true:

Both produce a sequential block in tetrahydrofolate synthesis
Both produce stimulation of tetrahydrofolate synthesis
Drug combination increases the immunity
Combination is less toxic
Combination is more convenient to use.

Crystaluria caused by sulfonamides is due to their:

Acetylation
Conjugation with glucuronic acid
Methylation
Microsomal oxidation
Excretion in the unchanged form.

Sulfa drugs are structural analogs of:

Para-amino-benzoic acid
Desoxyribonucleic acid
Ribonucleic acid
Tetrahydrofolic acid
Nicotinic acid.

A dose of preparation at the start of treatment with sulfonamides should be:

Striking
Threshold
Supporting
Individual
Toxic.

Therapeutic use of furazolidone includes:

Giardiasis
Antiseptics
Disinfecting
Helminthiasis
Malaria.

Nitroxolin is a drug for the treatment of:

Urinary pathways infections
Respiratory infections
Gastro-intestinal infections
Skin infections
Osteomyelitis.

Quinolones with 1 fluorine substitution include:

Ofloxacin
Nalidixic acid
Nitroxolin
Furacilinum

Furazolidone.

Ciprofloxacin belongs to;

Fluorquinolones

Antiseptics

Antibiotics

Sulfonamides

Antiprotozoal drugs.

Fluoroquinolones are contraindicated in the children because of:

Arthropathy

Agranulocytosis

Anemia

Thrombocytopenia

Allergy.

The drugs inhibiting DNA-gyrase belong to the group of:

Fluorquinolones

Tetracyclines

Monobactams

Macrolides

Aminoglycosides.

All listed, concerning fluoroquinolones, is true, except:

They do not achieve clinically useful blood and tissue concentrations

They have high oral bioavailability

They are eliminated mostly by kidneys

They have wide spectrum of action

They may be used in the treatment of tuberculosis.

Fluorquinolones have:

The widest spectrum and low toxicity

Narrow spectrum and low toxicity

Wide spectrum and high toxicity

Narrow spectrum and high toxicity

Wide spectrum and high allergic potential.

A patient with acute bronchitis is prescribed with co-trimoxazole. It is known that this preparation contains the sulfa drug and trimetoprim. In which way these agents realize their synergic action?

They block 2 stages in tetrahydrofolate synthesis

They both block the first stage in tetrahydrofolate synthesis

They both block the second stage in tetrahydrofolate synthesis

Trimetoprim decreases the side-effects of sulfonamide

Trimetoprim improves the bioavailability of sulfonamide.

A patient with intestinal infection is treated with phthalylsulfathiazole (Phthalazolum). This sulfa drug is inactive in vitro, but active in the intestine. Which active agent is liberated in this case?

Norsulfazole

Sulfacetamide

Sulfadimezine

Sulfalen

Salazopyridazine.

A 25-year-old woman has gonorrhea. She is prescribed with co-trimoxazole. What is the mechanism of action of this combined sulfonamide?

Folate antagonism

Inhibition of cell wall synthesis

Inhibition of protein synthesis

Blockade of topoisomerase II

Inhibition of mitochondrial processes.

When sulfa drugs have been used for prevention of gastro-intestinal infections, they caused an increase in frequency of blood diseases. Which side-effect of sulfonamides was a background of these complications?

Bone marrow suppression

Allergy

Crystaluria

Phototoxicity

Stevens-Johnson syndrome.

Nocardiasis is treated with sulfonamide. Analysis of patient's urine shows presence of crystals. Which preventive measure can decrease crystals' formation caused by sulfas?

Alkalinization of body liquids by mineral water

Acidification of body liquids by fruit juice

Diet rich in proteins

Diet rich in carbohydrates

Diet rich in fish and sea products.

A patient with acute cystitis was prescribed a highly active antimicrobial drug (fluoroquinolone derivative). It has wide spectrum bactericidal effect. The mechanism of its action is connected with the inhibition of DNA-gyrase. What drug is this?

Ciprofloxacin

Co-trimoxazole

Ceftriaxon

Furozolidone

Nitroxolin.

A 20-year-old girl visited a doctor with complaints on increased pus-like vaginal discharge, painful urination, and abdominal pain. *Neisseria gonorrhoeae* was detected in vaginal discharge. Acute gonorrhea was diagnosed and ofloxacin was prescribed to the patient. Which group is this drug from?

Fluorquinolones

Sulfonamides

Nitrofurans

Quinolones

Nitroimidazoles.

A patient consulted his doctor with complaints of common weakness, increased body temperature, and painful urination. Protein, leucocytes, and small amount of erythrocytes were detected in urine. The diagnosis was: Acute pyelocystitis. Oxiquinoline derivative was used as uroseptic in this patient. What drug is it?

Nitroxolin

Ciprofloxacin

Ofloxacin
Nalidixic acid
Furozolidone.

Furazolidone is used to treat:

All listed
Intestinal infections
Urinary tract diseases
Giardiasis
Trichomoniasis.

Nalidixic acid is characterized by:

Narrow spectrum including Gram-negative bacilli
Narrow spectrum including Gram-positive cocci
Narrow spectrum including *Candida albicans*
Wide spectrum including Gram-negative and Gram-positive bacteria
Wide spectrum including bacteria and protozoa.

Synthetic antimicrobial drug which can cause disulfiram-like reaction:

Furozolidone
Nitroxoline
Lomefloxacin
Levofloxacin
Nalidixic acid.

Synthetic antifungal drugs are all, except:

Nystatin
Itraconazole
Fluconazole
Clotrimazole
Terbinafine.

Mechanism of action of fluconazole and other azoles is:

Inhibition of synthesis of fungal membrane ergosterol
Destruction of cell wall
Folate antagonism
Inhibition of protein synthesis
Inhibition of desoxyribonucleic acid function.

Antifungal antibiotic used to treat *Candida* infection is:

Nystatin
Fluconazole
Itraconazole
Nalidixic acid
Nitroxolin.

Terbinafine is a synthetic antifungal, active against all pathological fungi affected human body. Its effect relates to destruction of cell membrane of the fungi and the inhibition of key enzyme of ergosterol synthesis. What is the name of this enzyme?

Squalen oxidase
Topoisomerase II
Transpeptidase

Dihydrofolate reductase
Dihydropteroate synthase.

Doxacycline is prescribed to 24-year male patient suffering from prostatitis. It is recommended to take the antibiotic together with itraconazole, a potent synthetic antifungal agent. What is the purpose of itraconazole's administration in the given situation?

Prevention of Candida infection
Potentiation of antibiotic's action
Anti-inflammatory action
Prevention of secondary bacterial infection
Prevention of secondary viral infection.

Treatment of systemic mycosis caused by *Histoplasma capsulata* by polyen antifungal has been complicated by fever, chills, rigor, nausea, vomiting, myalgia, and headache during IV infusions. Which preparation has produced such side-effects the most probably?

Amphotericin B
Nystatin
Griseofulvin
Clotrimazole
Terbinafine.

Sulfonamides are effective against:

All listed
Bacteria
Chlamidia
Actinomyces
Protozoa.

Mechanism of sulfonamides antimicrobial action is:

Inhibition of dihydropteroate synthase
Inhibition of dihydropteroate reductase
Inhibition of monoaminooxydase
Inhibition of cyclooxygenase
Inhibition of transpeptidase.

Sulfonamides potency is decreased in the co-administration with:

Local anesthetics- para-aminobenzoic acid esters
Local anesthetics from substituted amides group
Non-narcotic analgesics
Folate antagonists
Vitamin preparations.

Indications to use of fluorquinolones are:

All listed
Urinary tract infections
Bacterial diarrhea
Respiratory infections
Infections of bones and joints.

Fluorquinolones are active against:

All listed
Gram-negative bacteria

Gram-positive bacteria
Mycobacterium tuberculosis
Mycoplasma and chlamidia.

Module 2. Lesson 9. Pharmacology of antibiotics

All cell wall synthesis inhibitors are:

Bactericidal antibiotics
Bacteriostatic antibiotics
Narrow spectrum antibiotics
Wide spectrum antibiotics
Alternative antibiotics.

Natural penicillins have:

Narrow spectrum of action
Bacteriostatic action
Wide spectrum of action
High toxicity
Low allergic potential.

Orally used penicillin, having wide spectrum, but inactivated by beta-lactamase, is:

Ampicillin
Benzylpenicillin-sodium
Oxacillin
Bicillin-1
Bicillin-5.

Orally used penicillin resistant to beta-lactamase is only:

Oxacillin
Penicillin G
Amoxicillin
Bicillin-5
Ampicillin.

Most long-acting cephalosporin of the third generation is:

Ceftriaxone
Cefalexin
Cefasolin
Cefoperazone
Cefpirome.

First-generation cephalosporin for oral administration is:

Cefalexin
Cefazolin
Cefoperazone
Cefpirome
Ceftriaxone.

First-generation cephalosporin for parenteral administration is:

Cefazolin
Cefalexin

Ceftriaxone
Cefotaxime
Cefapime.

Indications to use of cephalosporins of the third generation are:

All listed
Severe infections of respiratory and urinary pathways
Sepsis
Meningitis
Infections caused by non-identified microbes.

The following statement is true as regards meropenem:

It is carbapenem derivative, related to beta-lactam antibiotics
It is 7-aminocephalosporanic acid derivative
It is 6-aminopenicillanic acid derivative
It is antibiotic of choice
It is narrow spectrum antibiotic.

A patient has rheumatism and twice a year receives a season prophylaxis of rheumatic attack. For this purpose the antibiotic from long-acting natural penicillins is given intramuscularly once per week. Which preparation is used?

Bicillin-1
Benzylpenicillin-sodium
Bicillin-5
Ampicillin
Oxacillin.

A patient has staphylococcal pneumonia caused by penicillin-resistant strain. Alternative antibiotic from the first generation of cephalosporins is prescribed to him. Which preparation is probably used for the treatment of this patient?

Cefazolin
Benzylpenicillin-sodium
Amoxiclav
Ampicillin
Ceftriaxone.

A patient has severe infection caused by unknown microbe. The third generation cephalosporin is administered intravenously to the patient till the results of bacteriological study will be obtained. Which drug is suitable in this case?

Cefotaxime
Cefalexin
Cefazolin
Meropenem
Aztreonam.

A child with pneumonia due to pneumococci was treated with ampicillin. What is the mechanism of action of this antibiotic?

Inhibition of cell wall synthesis
Inhibition of protein synthesis
Inhibition of topoisomerase II
Folate antagonism
Denaturation of proteins.

A patient has phlegmon caused by cocci sensitive to benzylpenicillin-sodium. The drug is prescribed to the patient together with surgical treatment. Which measure is obligate before the first injection of antibiotic?

- Allergic test
- Blood test
- X-ray examination
- Bacteriological analysis
- None of listed.

An operation on knee joint is planned in a patient with a trauma of low extremity. Potent antibiotic from cephalosporins was given before the surgery to prevent possible infective complications. Which drug was used?

- Ceftriaxone
- Amoxicillin
- Amoxiclav
- Cefalexin
- Cefasolin.

Basis antibiotic for primary syphilis is:

- Benzylpenicillin-sodium
- Cefazolin
- Erythromycin
- Chloramphenicol
- Doxacycline.

The main idea of amoxicillin's combination with clavulanic acid is:

- An increase in the resistance to beta-lactamases
- Prolongation of action
- A decrease in toxicity
- A decrease in allergic properties
- An increase in spectrum of action.

Side-effects of cephalosporins include all, except:

- Ototoxicity
- Allergy
- Changes of blood film
- Renal toxicity
- Hypocoagulation of blood.

Allergic reaction to penicillin:

- Requires replacement of antibiotic
- Disappears spontaneously in the course of time
- Can be prevented by reducing of the dose
- Can not be in the form of anaphylactic shock
- Develops very rarely.

The use of benzylpenicillin-sodium in staphylococcal infections is limited because of its:

- Restriction by beta-lactamase of staphylococci
- Narrow spectrum of action
- Inability to interact with penicillin-binding proteins in staphylococci
- Destruction by acid

Short duration of action.

In few minutes after the injection of benzylpenicillin-sodium it is developed a short breathing, hypotension, and unconsciousness. From patient's anamnesis it is known that he is prone to allergic reactions. Which complication of penicillin G is manifested?

Anaphylaxis

Direct toxicity

Endotoxic reaction

Dysbacteriasis

Microbes' resistance.

Clavulanic acid is:

Beta-lactamase inhibitor

Alternative antibiotic

Antibiotic of choice

Synthetic antimicrobial

Stimulant of immunity.

Large dose of benzylpenicillin-sodium have caused convulsions. Function of which neurotransmitter is disturbed by the antibiotic?

Gamma-aminobutyric acid

Norepinephrine

Dopamine

Serotonin

Acetylcholine.

Ampiox is a combination of:

Ampicillin and oxacillin

Ampicillin and amoxicillin

Amoxicillin and clavulanic acid

Oxacillin and clavulanic acid

None of listed.

Combined antibiotic amoxiclav differs from amoxicillin by:

Resistance to lactamases

Better bioavailability

New mechanism of action

More potent action

Lower toxicity.

Combination of amoxicillin and clavulanic acid is named:

Amoxiclav

Ampiox

Oletetrin

Co-trimoxazole

Bactrim.

All following drugs are antibiotics, except:

Co-trimoxazole

Chloramphenicol

Ceftriaxon

Cefotaxime

Clarithromycin.

Antibiotics which contain beta-lactam ring in their structure are all, except:

Macrolides
Penicillins
Cephalosporins
Carbapenems
Monobactams.

Group of antibiotics which demonstrate bacteriostatic effect:

Macrolides
Cephalosporins
Penicillins
Aminoglycosides
Carbapenems.

All about amphotericin B is true, except:

Has not nephrotoxicity
Increases the permeability of fungus cell membrane
Is used in severe fungal infections
Has poor absorption in the gut
Is administered by intravenous infusion.

Antibiotic which contains four condensated rings in its structure is only:

Doxacycline
Amikacin
Azithromycin
Amoxicillin
Clindamycin.

Group of antibiotics inhibiting protein synthesis in 30S subunits of ribosomes is:

Tetracyclines
Macrolides
Azalides
Lincosamides
Chloramphenicols.

Groups of antibiotics inhibiting protein synthesis in 50S subunits of ribosomes are all, except:

Polypeptides
Macrolides
Azalides
Chloramphenicols
Steroids.

Tetracycline is stored in the body in:

The bones and teeth
The liver
The muscular tissue
The hairs, nails, skin
The fat tissue.

In a comparison with tetracycline, doxacycline is characterized by:

Both better bioavailability and prolonged action
Better bioavailability
Other mechanism of action
Wider spectrum of action
Prolonged action.

True information concerning gentamycin is:
All listed
It is aminoglycoside of the second generation
It has wide spectrum of action, including Pseudomonas
It is administered parenterally
It is the most ototoxic between other antibiotics of this group.

Polypeptide antibiotic active against only Gram-negative pathogens, including Pseudomonas aeruginosa, is:
Polymyxin B
Clarithromycin
Amikacin
Amphotericin B
Nystatin.

Polyenic antibiotic for prevention and treatment of candidiasis is:
Nystatin
Azithromycin
Tetracycline
Gentamycin
Polymyxin B.

Chloramphenicol is the antibiotic of choice to treat:
Salmonella infection
Tuberculosis
Syphilis
Candida infection
Streptococcus infection.

Protein synthesis inhibitors effective in the treatment of chlamidia infection are:
All listed
Doxacycline
Erythromycin
Azithromycin
Clarithromycin.

Antibiotic which disturbs ribonucleic acids synthesis is only:
Rifampin
Erythromycin
Amikacin
Polymyxin M
Polymyxin B.

Antibiotic of choice in osteomyelitis is:
Linkomycin
Erythromycin

Chloramphenicol
Rifampin
Polymyxin B.

Polyens are:

Antifungal antibiotics
Antibiotics of choice in Gram-positive infections
Antibiotics of choice in the infections caused by Gram-negative rods
Antibiotics of choice in the infection due to rickettsia
Antimycobacterial antibiotics.

Side-effect of erythromycin is:

Disturbances in liver function
Neurotoxicity
Nephrotoxicity
Phototoxicity
Dysbacteriasis.

Aminoglycosides may cause the following side-effects, except:

Hepatotoxicity
Nephrotoxicity
Ototoxicity
Neuromuscular disturbances
Allergy.

A patient with prostatitis was prescribed with doxacycline. A doctor advised to avoid sun bathes during the treatment. Which probable adverse reaction of tetracyclines is reason for such instruction?

Phototoxicity
Hepatotoxicity
Nephrotoxicity
Ototoxicity
Dysbacteriasis.

Rickettsia infection was treated with chloramphenicol. Bacteriological test showed high sensitivity of infectious agent to this antibiotic, but the therapy was complicated by endotoxic reaction. What is the origin of this complication?

Bacteriolysis and release of endotoxins from microbes
Direct toxicity of antibiotic for bone marrow
Nephrotoxicity of antibiotic and disturbances in its excretion
Hepatotoxicity of antibiotic and disturbances in its metabolism
Hypersensitivity and allergic reaction.

Young pediatrician wants to prescribe tetracycline to a 5-year-old child, but an experienced doctor corrects his indication and says that this antibiotic is contraindicated till the age of 8-12. What is the cause of such contraindication?

Disturbances in teeth formation
Disturbances in liver function
Impairment of normal microflora
Allergic reactions
Gastrointestinal distress.

Treatment of systemic mycosis caused by *Histoplasma capsulata* by polyenic antifungal antibiotic has been complicated by fever, chills, rigor, nausea, vomiting, myalgia, and headache. Which preparation has produced such side-effects the most probably?

Amphotericin B
Nystatin
Griseofulvin
Clotrimazole
Miconazole.

True information concerning gentamycin is:
It is the most ototoxic between other antibiotics of this group
It is aminoglycoside of the first generation
It has narrow spectrum of action
It is not administered parenterally
It is less toxic as compared to other antibiotics of this group.

Polyenic antibiotic for prevention and treatment of candidiasis as side-effect of wide-spectrum antibiotics is:
Nystatin
Azithromycin
Tetracycline
Gentamycin
Polymyxin M.

Chloramphenicol's specific side-effect in young baby is:
Grey syndrome
Endotoxic reaction
Anemia
Leucopenia
Skin rash.

Rifampin is an alternative antibiotic for all infections beside tuberculosis due to:
Rapid emergency of microbes' resistance
Narrow spectrum of action
Bacteriostatic action
High toxicity
None of listed.

Antibiotic - protein synthesis inhibitor with minimal allergic potential is:
Erythromycin
Linkomycin
Chloramphenicol
Gentamycin
Tetracycline.

According to the doctor's prescription a patient wants to buy tetracycline in a pharmacy. A pharmacist proposes him tablets containing the antibiotic together with nystatin and explains the advantages of given combination. What is probable explanation?
Nystatin is for prevention of candidiasis
Nystatin is a synergist to tetracycline
Nystatin decreases tetracycline's toxicity
Nystatin is for prevention of hypersensitivity

None of listed.

Trauma of a bone was complicated by osteomyelitis. Osteotropic antibiotic lincomycin is prescribed to a patient. This antibiotic has good bioavailability after the oral administration, but may cause life-threatening adverse reaction in the gut. What is the name of this side-effect?

Pseudomembranous colitis
Gastrointestinal bleeding
Gastrointestinal distress
Secondary malignancy
Peptic gastric ulcer.

Antibiotic which can cause yellow brown discoloration of teeth in children is:

Doxacycline
Erythromycin
Lincomycin
Fusidic acid.
Nystatin.

Ototoxicity, neurotoxicity and nephrotoxicity are the side-effects typical to:

Aminoglycosides
Beta-lactams
Polyenes
Polypeptides
Macrolides.

Candida infection of the mucous membranes is common adverse reaction of:

Wide spectrum antibiotics
Narrow spectrum antibiotics
Antibiotics of choice
Alternative antibiotics
None of listed.

A patient came to a doctor with complaints of urine and lacrimal liquid painted red. It is known from the patient's anamnesis that he was treated for pulmonary tuberculosis. What anti-tubercular antibiotic became the cause of such complications?

Rifampicinum
Streptomycini sulfas
Amikacinum
Tetracyclinum
Erythromycinum.

Phenomenon of "tetracycline teeth" caused by tetracycline is the manifestation of its:

Teratogenous action
Mutagenous action
Carcinogenous action
Allergic potential
Direct toxicity.

Toxic action of Laevomicetinum can displays as:

Inhibition of hemopoiesis
Disturbances of renal function
Disturbances of neurotransmission

Auditory disturbances
Induction of microsomal oxidation.

Doxacycline can cause all side-effects, except:
Ototoxicity
Hepatotoxicity
Phototoxicity
Dyspepsia
Dysbacteriasis.

Liver failure is the adverse reaction of:
Tetracyclines
Penicillins
Cephalosporins
Aminoglycosides
Chloramphenicols.

Anti-helicobacter antibiotic from the group of macrolides and azalides is:
Clarithromycin
Doxacycline
Lincomycin
Fusidic acid.
Nystatin.

Tetracycline is characterized by the all, except:
Inhibition of cell wall synthesis
Inhibition of protein synthesis
Wide spectrum of action
Bacteriostatic action
Four rings in its molecule

Module 2. Lesson 10. Antimycobacterial drugs. Anispirochetal drugs. Antiviral drugs

The most potent synthetic antimycobacterial drug is:
Isoniazid
Streptomycin
Sodium para-aminosalicylate
Pyrazinamide
Ethionamide.

Anti-tubercular antibiotic, contraindicated to patient with neuritis of auditory nerve, is:
Streptomycin
Isoniazid
Ethambutol
Rifampin
Pyrazinamide.

Side-effects of isoniazid in the nervous system are due to:
Antagonism with pyridoxine
Inhibition of synthesis of mycobacterial cell wall
Inhibition of ribonucleic acids synthesis

High doses of preparation
Long-lasting treatment.

Antimycobacterial antibiotic, which inhibits ribonucleic acid polymerase, is:

Rifampin
Streptomycin
Amikacin
Levofloxacin
Isoniazid.

Isoniazid is characterized by all, except:

It is an alternative antibiotic to treat resistant forms of tuberculosis
It is first line anti-tubercular preparation
It is more effective in slow acetylators comparing with fast acetylators
It is less neurotoxic if given along together pyridoxine
It acts on extra- and intracellular mycobacteria.

The second-line anti-tubercular drugs are:

Alternative preparations to treat resistant forms of tuberculosis
The most active preparations
The least toxic preparations
Preparations to treat primary diagnosed tuberculosis
Preparations for prophylaxis of tuberculosis.

The first-line antimycobacterial antibiotic is only:

Rifampin
Kanamycin
Streptomycin
Amikacin
Cycloserine.

Acetylation of isoniazid is characterized by:

Genetically determined speed of reaction
Slow inactivation of the drug in all patients
Rapid inactivation of the drug in all patients
Equal speed of drug's inactivation in all patients
A decrease in drug's solubility.

Mechanism of action of sodium para-aminosalicylate is:

Folate antagonism in Mycobacterium tuberculosis
Inhibition of cell wall synthesis in Mycobacterium tuberculosis
Inhibition of protein synthesis in Mycobacterium tuberculosis
Inhibition of ribonucleic acid polymerase in Mycobacterium tuberculosis
None of listed.

Vision disturbance caused by ethambutol is:

Inability to discriminate between red and green
Macropsia
Blurred vision
Micropsia
Xantopsia.

Pyrazine analog, used in multi-agent short-term therapy of uncomplicated pulmonary tuberculosis, is:

Pyrazinamide
Ethionamide
Ethambutol
Cycloserine
Ciprofloxacin.

Fluoroquinolones, used as second line anti-tubercular drugs, are:

Ciprofloxacin and ofloxacin
Streptomycin and kanamycin
Amikacin and cycloserine
Ethionamide and propionamide
Pyrazinamide and ethambutol.

Combined regimen of tuberculosis pharmacotherapy is for:

Prevention of microbes' resistance
Prevention of drugs' side-effects
Prevention of impairment of immunity
Synergic action on mycobacteria
Shortening of the term of treatment.

Patient suffering from tuberculosis was treated with isoniazid. In the course of treatment peripheral neuritis was developed. What is the mechanism of this side effect?

Interference with pyridoxine metabolism
Direct toxic effect of the drug on peripheral nerves
Inhibition of myoneural junctions
Interference with folic acid synthesis
Inhibition of sodium channels.

A patient with lung tuberculosis is treated with a drug, which has a wide spectrum of antimicrobial action including mycobacteria of tuberculosis and leprosy. Its effect is connected with inhibition of ribonucleic acids synthesis in bacteria. The drug paints urine, sputum, and lacrimal liquid red. What is this?

Rifampin
Ethambutol
Streptomycin sulfate
Ethionamide
Isoniazid.

A patient has miliary disseminated tuberculosis resistant to the first-line preparations. He has auditory neuritis as concomitant disease. Which second-line anti-tubercular antibiotic is contraindicated to this patient?

Streptomycin
Rifampin
Cycloserine
Ofloxacin
Isoniazid.

Routine every-year Ro-investigation has shown uncomplicated pulmonary tuberculosis in a student. Pyrazine analog of nicotinamide was included into multi-agent short-term therapy of this patient. Which drug was used?

Pyrazinamide
Isoniazid
Ethionamide
Ethambutol
Ciprofloxacin.

A patient complained of cough, common weakness, subfebrile temperature. These signs have appeared few months ago. Ro-examination has shown cavern in the apex of the left lung. Isoniazid was prescribed to him in a combination with two other antimycobacterial drugs. What is the mechanism of isoniazid's action?

Inhibition of mycolic acids synthesis
Inhibition of protein synthesis
Inhibition of ribonucleic acids synthesis
Inhibition of desoxyribonucleic acids reduplication
Inhibition of folate metabolism.

Antiviral drug for the treatment of herpetic infection is:

Acyclovir
Rimantadine
Zidovudine
Isoniazid
Pyrazinamide.

Interferon (Laferon) is:

Wide spectrum antiviral preparation
Wide spectrum antibiotic
Sulfonamide
Antifungal drug
Antiprotozoal drug.

Only one antiviral preparation is reverse transcriptase inhibitor:

Zidovudine
Acyclovir
Valacyclovir
Rimantadine
Interferon.

Antiviral ointment to treat Herpes labialis is:

Ointment of acyclovir
Ointment of nystatin
Ointment of prednisolone
Ointment of erythromycin
Ointment of Aethonium.

Antiviral preparation for the prophylaxis and treatment of influenza is:

Rimantadine
Acyclovir
Azidothymidine
Zidovudine
Any of listed drugs.

Zidovudine:

Inhibits reverse transcriptase
Inhibits human desoxyribonucleic acid polymerase
Can be used to treat herpes and cytomegalovirus infection
Does not reduce mortality from acquired immune deficit syndrome
Is not combined with HIV protease inhibitors.

All concerning rimantadine is true, except:
It is used to treat herpes and cytomegalovirus infection
The drug blocks the viral membrane matrix protein M2
Its spectrum of action includes viruses of influenza A2 and encephalitis
It is taken orally for prevention and treatment of influenza
It is relative to antiparkinsonian drugs.

Acyclovir is:
Synthetic purine nucleoside analog (acycloguanosine)
Midantan derivative relative to amantadine
Glycoprotein produced by immune cells
Synthetic nucleoside analog (azidothymidine)
Synthetic nucleoside analog (adenine arabinoside).

Antiviral drugs with immune stimulating properties are:
Interferons
Inhibitors of desoxyribonucleic acid polymerase
Reverse transcriptase inhibitors
HIV protease inhibitors
Neuroaminidase inhibitors.

A patient has herpetic rash on the nose wings and upper lip. Antiviral ointment is applied for etiotropic therapy. Which medicinal substance does the ointment contain?

Acyclovir
Azidothymidine
Gancyclovir
Proteflazid
Oseltamivir.

Analysis of morbidity has shown season increase of acute respiratory viral infections and influenza A2. Antiviral preparation for oral administration may be used for prophylaxis of this type of flu. What drug is it?

Rimantadine
Acyclovir
Zidovudine
Laferon
Oseltamivir.

A surgeon has performed a surgery in a HIV infected patient and damaged the skin of his hand by accidental needle stick. Which antiviral preparation should be used for prophylaxis of HIV infection in this case?

Zidovudine
Laferon
Oseltamivir
Gancyclovir
Valacyclovir.

A woman has caught cold. Her illness has been complicated by severe headaches, vomiting, a stiff neck, confusion, and disorientation. Herpetic encephalitis has been diagnosed and acyclovir as intravenous infusion was administered to the patient. What mechanism provides antiviral action of this drug?

Inhibition of desoxyribonucleic acid polymerase

Binding to interferon receptors

Reverse transcriptase inhibition

HIV protease inhibition

Neuroaminidase inhibition.

22-year-old boy is an injectable drug abuser. He exhibits loss of appetite, night sweats, significant weight loss, mouth ulcers and persistent coughing. HIV test is positive. Zidovudine was prescribed to this patient as etiologic therapy. What is the mechanism of its action?

Inhibition of reverse transcriptase

Blockage of the viral membrane matrix protein M2

Inhibition of viral desoxyribonucleic acid polymerase

Inhibition of HIV protease.

Inhibition of neuroaminidase.

Antiviral agent of wide spectrum of action was administered to a patient with viral hepatitis A. The treatment was complicated by fever, flu-like condition, and leucopenia. Which antiviral preparation can cause such side-effects?

Laferon

Acyclovir

Valacyclovir

Oseltamivir

Azidothymidine.

A patient with chickenpox in anamnesis has characteristic skin rash on his torso. The rash is vesicular and forms small blisters with serous exudate. It is accompanied by fever and malaise. The diagnosis is: Herpes zoster. Which drug should be prescribed to the patient?

Valacyclovir

Zidovudine

Rimantadine

Ribavirin

Oseltamivir.

Potent antiviral preparation, which inhibits synthesis of viral ribonucleic acids and proteins and decreases intra-cell concentration of guanosine triphosphate, is used to treat chronic hepatitis C. What is the name of the drug?

Ribavirin

Remantadine

Oseltamivir

Azidothymidine

Gancyclovir.

Anti-tubercular drug belonging to the antibiotics is only:

Rifampin

Isoniazid

Pyrazinamide

Ethambutol

Ciprofloxacin.

Isoniazid has following unwanted effect:

Peripheral neuropathy

Cardiotoxicity

Immunotoxicity

Loss of hair

Vision disturbances.

Ethambutol can cause characteristic unwanted effect displayed as:

Red-green color blindness

Crystalluria

Psychic disturbances

Hepatotoxicity

Cardiotoxicity.

The drug inhibiting synthesis of viral deoxyribonucleic acid is:

Acyclovir

Rimantadine

Zidovudine

Oseltamivir

Azidothymidine.

All of the following antiviral drugs can be used as anti-influenza agents, except:

Acyclovir

Rimantadine

Oseltamivir

Amantadine

Interferons.

Module 2. Lesson 11. Antiprotozoal medicinal drugs. Antihelminthic medicinal drugs

Antimalarial drugs are all, except:

Emetine

Chloroquine

Quinine

Primaquine

Pyrimethamine.

Therapeutic uses of chloroquine include all, except:

Giardiasis and trichomoniasis

Acute attack of malaria

Causal prophylaxis of malaria

Rheumatoid arthritis

Tachyarrhythmia.

Mechanism of action of chloroquine includes:

Inhibition of hem polymerase, preventing hemoglobin digestion

Inhibition of protein synthesis

Inhibition of ergosterol synthesis

Inhibition of folate metabolism

Increase in permeability of cell membrane.

Mechanism of action of pyrimethamine is:

- Inhibition of folate metabolism
- Inhibition of protein synthesis
- Inhibition of ergosterol synthesis
- Inhibition of hem polymerase
- Inhibition of nucleic acids synthesis.

Idiosyncrasy to quinine manifests by:

- Acute intravascular hemolysis
- Depression of heart contractility and conductivity
- Oppression of vision and auditory
- Stimulation of gut motility
- Stimulation of uterus contractions.

The cause of idiosyncrasy to quinine is:

- Deficit of glucose-6-phosphate dehydrogenase
- Deficit of acetylcholinesterase
- Inhibition of liver enzymes
- Induction of liver enzymes
- Inhibition of monoaminoxidase.

Only one drug is to treat toxoplasmosis:

- Pyrimethamine
- Quinine
- Primaquine
- Artemisinin
- Furazolidone.

Mechanism of action of sodium stibogluconate is:

- Blockage of SH-groups of enzymes in leishmania
- Inhibition of protein synthesis in leishmania
- Inhibition of synthesis of ergosterol
- Inhibition of hemoglobin digestion
- Inhibition of folic acid synthesis in leishmania.

Anti-amoebic drug for all localizations of amoebas is:

- Metronidazole
- Emetine
- Tetracycline
- Iodoquinol.
- Quinine.

Metronidazole's mechanism of action is:

- Conversion of nitro-groups into amino-groups with formation of toxic products
- Inhibition of cell wall synthesis
- Inhibition of protein synthesis
- Inhibition of hem polymerase and accumulation of hemoglobin in protozoa
- Blockage of SH-groups of enzymes.

Metronidazole is active against all protozoa and bacteria, except:

Plasmodium malariae
Amoeba
Giardia
Trichomonas
Helicobacter pylori.

Antiprotozoal drug, used to treat ulcer of the stomach, is:

Metronidazole
Quinine
Chloroquine
Emetine
Pyrimethamine.

Antibiotic for the treatment of cutaneous form of leishmaniasis is:

Monomycin
Kanamycin
Neomycin
Aminoacrichin
Metronidazole.

Antibiotics for treatment of chlamidia infection belong to groups:

Macrolides and tetracyclins
Penicillins and cephalosporins
Polyens and polymyxins
Aminoglycosides and lincosamides
Carbapenems and monobactams.

Preparation, effective in the treatment of giardiasis, trichomoniasis, balantidiasis, amoebiasis, and cutaneous leishmaniasis, is:

Metronidazole
Furazolidone
Chloroquine
Tetracycline
Primaquine.

Metronidazole, co-administered with ethyl alcohol, produces:

Disulfiram-like reaction
Allergic reaction
Gastro-intestinal disorders
Psychic disorders
Frequent urination.

Artemisinin:

Has the most rapid action against Plasmodium falciparum
Acts against Plasmodium falciparum similar to quinine
Has not anti-cancer activity
Has not antihelminthic properties
Is not used in combined regimen.

Preparation of choice for parenteral administration in malarial coma is:

Chloroquine
Mefloquine

Primaquine
Pyrimethamine
Fansidar.

A tourist visited one of African countries felt ill. The symptoms are similar to mild viral illness: weakness, fever, chills, headache and muscle pain. A doctor suspects that a patient has malaria. Which drug should be prescribed in the first signs of this infection?

Chloroquine
Primaquine
Pyrimethamine
Chloroguanide
Artemisinin.

A student from Central Africa was admitted to the hospital with temperature of 38.5 °C, headache, and joint pains. Simultaneous increase in size of the liver and spleen was detected. Blood sampling revealed *Plasmodium falciparum* and confirmed the diagnosis of malaria. Chloroquine was prescribed to the patient. What group of antimalarials is it from?

Hemato-shizonticidal agents
Tissue-shizonticidal agents
Gameticidal agents
Sporonticidal agents
Mixed acting agents.

A man has come back to Ukraine from the trip to tropical country. He was well until 3 days ago fever, abdominal pain and bloody loose stools have developed. Amebic dysentery was diagnosed and iodoquinol was prescribed to the patient. What kind of drug is it?

Luminal amebicide
Tissue amebicide
Mixed amebicide
Blood shizonticidal agent
Tissue shizonticidal agent.

A woman visited a doctor complaining watery diarrhea, abdominal cramping, nausea, and gas. When laboratory investigation was done the diagnosis was: Giardiasis. Nitrofurantoin derivative was used to treat this patient. What is the drug?

Furozolidone
Metronidazole
Ornidazole
Tinidazole
Tetracycline.

A man worked in southern Europe. He felt ill and had a fever, fatigue, weakness, and appetite loss. A physical exam showed gray dark skin, enlarged spleen, liver, and lymph nodes. Visceral leishmaniasis was diagnosed. Which drug must be used in this case?

Sodium stibogluconate
Quinacrine
Metronidazole
Monomycin
Amphotericin B.

Anthelmintics are used to treat:
Infections caused by parasitic worms

Bacterial infections
Viral infections
Protozoal infections
Infections caused by chlamidia.

Anthelmintic with immune stimulating action is:

Levamisole
Mebendazole
Albendazole
Praziquantel
Niclosamide.

Niclosamide is used for the treatment of:

Cestodosis
Nematodosis
Trematodosis
Toxoplasmosis
Giardiasis.

Spectrum of action of mebendazole includes:

All listed.
Pinworm (*Enterobius vermicularis*)
Roundworm (*Ascaris lumbricoides*)
Guinea worm (*Dracunculus medinensis*)
Hookworm (*Ancylostoma duodenale*).

Preparation, effective against blood flukes, is:

Praziquantel
Levamisole
Mebendazole
Albendazole
Metronidazole.

Levamisole, used as immune stimulant, may cause:

All mentioned complications
Headache
Fever
Influenza-like syndrome
Leucopenia.

A patient with roundworm disease was prescribed with anthelmintic preparation for a single-dose therapy. This drug also stimulates T-dependent immune reactions, increases the activity of phagocytes, and is used to regulate immune balance in collagenosis. What anthelmintic was prescribed?

Levamisole
Mebendazole
Albendazole
Praziquantel
Chloroquine.

Mixed helminthic invasion (ascariasis and enterobiasis) has been revealed in a patient. What anthelmintic drug with wide spectrum is expedient for use?

Mebendazole
Levamisole
Niclosamide
Praziquantel
Artemisinin.

Hookworm infestation has been diagnosed in a patient. Mebendazole was given orally twice daily during 3 days for this helminthiasis. Which process in the parasitic worm is a target for mebendazole's action?

Polymerization of tubulin
Function of chloride channels
Neuromuscular transmission
Function of covering tunic
None of listed.

Routine examination of the student from African country detected mild anemia and malnutrition. Blood sampling showed extremely high eosinophilic granulocytes count. Eggs of schistosoma were identified in stool. The diagnosis is: Schistosomiasis. Which antihelminthic is the drug of choice for this blood fluke infestation?

Praziquantel
Mebendazole
Albendazole
Levamisole
Decaris.

A schoolboy was diagnosed with helminthiasis. Eggs of *Ascaris lumbricoides* were identified in stool. Mebendazole was prescribed to a patient as a single dose treatment. Which group of antihelminthics is this preparation from?

Agents of wide antihelminthic spectrum
Drugs for treatment of nematodoses
Drugs for treatment of cestodoses
Drugs for treatment of trematodoses
Antihelminthics from medicinal plants.

Detail examination of a patient with a loss of body weight and hepatic dysfunction has detected Echinococcus cyst in the liver. Albendazole was used for his pre-surgical treatment. What is the mechanism of its action?

Inhibition of microtubule-dependent functions
Paralysis of muscles and damage of covering tunic
Nicotine-like action on neuromuscular transmission
Inhibition of glucose metabolism
Disturbances in protein synthesis.

The drug widely used in the prophylaxis and treatment of malaria:

Chloroquine
Quinine
Emetine
Metronidazole
Furazolidone.

The drug used in trichomoniasis treatment is only:

Metronidazole

Emetine
Quinine
Pyrimethamine
Tetracycline.

The antimalarial drug belonging to pyrimidine derivatives:

Pyrimethamine
Chloroquine
Primaquine
Quinine
Artemisinin.

The group of antibiotics having antimalarial effect:

Tetracyclines
Cephalosporins
Aminoglycosides
Rifampicins
Glycopeptides.

Antihelminthic drug which is benzimidazole derivative:

Mebendazole
Metronidazole
Praziquantel
Primaquine
Niclosamide.

Module 2. Lesson 12. Preparations of acids, alkalis and salts of alkaline and earth-alkaline metals. Principles of acute poisonings treatment. Antidotes

Principles of acute poisoning treatment include all, except:

Antimicrobial therapy
A decrease in poison absorption
An increase in poison elimination
Specific antidote therapy
Symptomatic therapy.

An antidote in poisoning with salts of heavy metals and cardiac glycosides is:

Unithiolum
Acetylcysteine
Atropine
Naloxone
Protamine sulfate.

The antidote in acetaminophen poisoning is:

Acetylcysteine
Naloxone
Atropine
Unithiolum
Deferoxamine.

Alloxim belongs to the group of:

Reactivators of cholinesterase
Chelating agents
Sulfur containing agents
Antagonists of opioid receptors
M-cholinoblockers.

One of the main purposes of detoxification is:
To reduce poison absorption
To decrease removal of toxic agent
To neutralize poison by antidote
To support damaged functions of the organism
To resuscitate the patient.

For enhance of poison removal it is necessary:
Hemodialysis and hemosorption
Lavage of stomach
Induced emesis
Use of astringents
Irrigation of skin and mucous membranes.

For reduction of poison absorption is used:
Adsorbents (activated charcoal, enterosgel)
Forced diuresis with furosemide or mannitol
Altering of urinary pH
Peritoneal dialysis
Stimulation of liver enzymes activity.

Solution for lavage of stomach in acute poisonings most often contains:
Potassium permanganate
Sodium bicarbonate
Sodium chloride
Acetic acid
Tannin.

Emesis in a patient with acute poisoning can be induced by:
Apomorphine (parenterally)
Activated charcoal (orally)
Egg-white (orally)
Furosemide (parenterally)
Magnesium sulfate (orally).

All, concerning liquids for irrigation of skin and mucous membranes affected by toxic agents, is true, except:
Ethyl alcohol is for neutralizing of acid
Weak solution of ammonia is for neutralizing of formaldehyde
Oil is for washing out of phenol
Solution of sodium chloride is for neutralizing of silver nitrate
Weak solution of citric acid is for neutralizing of alkali.

Forced diuresis is meaning:
Hydratation with following stimulation of diuresis
Rehydratation of the organism

Dehydration of the body
Disturbances in electrolyte balance
None of listed.

The drug of choice to perform forced diuresis is:

Furosemide
Magnesium sulfate
Phenobarbital
Enterosgel
Dichlothiazide.

Phenobarbital's administration in acute poisoning is for:

Fastening of poison metabolism
Alkalinization of urine
Acidification of urine
Stimulation of poison excretion
Forced diuresis.

Use of osmotic purgatives in acute poisonings is aimed on:

Fast poison removal from intestines and bowel
Fast poison removal from the stomach
Fast poison excretion through the kidneys
Induction of liver enzymes for poison metabolism
Fast poison elimination.

Symptomatic therapy of acute poisonings relates to:

Supporting of damaged functions
Use of specific antidotes
Detoxification
Prevention of infection
Prevention of stress.

Preparation for symptomatic treatment of bradycardia, caused by morphine overdose. is:

Atropine
Naloxone
Potassium permanganate
Magnesium sulfate
Nikethamide.

The goal of chlorpromazine use in Belladonna poisoning is:

Symptomatic therapy of psychosis
Specific antagonism with atropine
Neutralizing of atropine in the stomach
Stimulation of atropine's biotransformation in the liver
Providing of forced diuresis.

Phenylephrine as symptomatic therapy is administered in:

Collapse caused by overdose of ganglia blockers
Seizures caused by strychnine
Colic caused by lead
Stop of breathing caused by carbon monoxide
Spasm of bronchi caused by organic phosphates.

After a random internal administration of liquid a patient had pains in the epigastral area. The mucous membrane of the mouth has white color. Emetic masses are of white color, soon grow dark. Later, shock is developed. The diagnosis is: Acute poisoning with silver salt. Which solution is necessary for lavage of stomach in this poisoning?

Solution of sodium chloride

Solution of ethyl alcohol

Solution of potassium permanganate

Cold water

Solution of ammonia chloride.

A patient was delivered to a clinic in the grave condition: severe abdominal pain, vomit, and stool with blood admixtures. The copper-colored shade of the mucous membrane in the oral cavity and throat was observed. The diagnosis is: Acute poisoning with mercury salt. What is the antidote for its specific therapy?

Unithiolum

Alloxim

Naloxone

Ammonia chloride

Neostigmine.

A patient was taken to emergency room with such symptoms, as unconsciousness, paleness; low blood pressure; oppression of respiration; hyporeflexia; hypotermia; involuntary urination and defecation. Perspired air has specific alcohol odor. The diagnosis is: Acute alcohol intoxication. Glucose, insulin, and vitamins preparations are administered intravenously to the patient. What is the purpose of this administration?

Promotion of alcohol metabolism

Neutralization of toxic agent

Promotion of poison's excretion

Protection of brain tissue

Inhibition of alcohol absorption in the gut.

A patient has taken strong acid with the attempt of suicide. She had coagulation necrosis of mucous membrane in oral cavity and severe pain lengthways the gullet and in the epigastral area. Biochemical analysis of blood detected metabolic acidosis. Which drug should be given intravenously for correction of this manifestation of poisoning?

Sodium bicarbonate

Ammonia chloride

Sodium chloride

Glucose

Potassium chloride.

A patient was delivered to emergency department in poor condition. He is unconsciousness; reflexes are increased; muscles tone is normal; eye pupils are miotic. Bradycardia and Chayne-Stocks breath are registered. From anamnesis it is known that the patient is opiate abuser. Morphine overdose is diagnosed. Which drug should be used as antidote in this poisoning?

Naloxone

Atropine

Alloxim

Deferoxamine

Penicillamine.

An overdose of cardiac glycosides manifested as premature ventricular beats, an increase in signs of heart failure; anorexia, vomiting, nausea; and xantopsia. Unithiolum was administered to a patient as specific pharmacotherapeutic agent for this poisoning. Which group of antidotes is it from?

Sulfur containing compounds

Chelating agents

Cholinesterase reactivators

Antagonists of opioids

M-cholinoblockers.

A 52-year-old female patient consulted her doctor with complaints of liver disease, but laboratory testing have detected iron overload and hemochromatosis was diagnosed. Which chelating agent may be used to treat this disease?

Deferoxamine

Sodium edetate

Trilon B

Tetacin-calcium

Penicillamine.

A patient has chronic active hepatitis and neuropsychiatric symptoms such as cognitive deterioration, cogwheel rigidity, slowed movements and a lack of balance. The brown ring on the edge of the iris is present. His diagnosis is: Wilson's disease (hepatolenticular degeneration). Which drug must be used for pathogenic therapy of the disease if its symptoms are connected with copper accumulation in tissues?

Penicillamine

Sodium edetate

Deferoxamine

Acetylcysteine

Apomorphine.

A patient with angina pectoris accidentally has taken more than the normal amount of nitroglycerine. He had shortness of breath, blurred vision, low blood pressure, rapid heartbeat, headache, bluish color to lips and fingernails, flushing skin, and nausea. Which antidote should be administered to him?

Cromosmon

Alloxim

Atropine

Neostigmine

Unithiolum.

Acute methanol poisoning has developed as a consequence of ingestion of illicit liquor. 12 hours after ingestion, a patient was delivered to poison control center with late manifestations of the poisoning: visual disturbances and seizures. 5% solution of ethanol has given intravenously as a part of combined therapy. Which effect of ethanol is used in this case?

Antidote action

Antiseptic action

Anti-foam action

Anti-shock action

Stimulation of gastric secretion.

If the poisoning is accompanied by seizures, it is necessary to administer:

Diazepam

Phenylephrin
Adrenalin
Atropine
Morphine.

If the urgent condition is accompanied by severe pain, it is necessary to administer:

Morphine
Diazepam
Adrenalin
Atropine
Corglyconum.

Adsorbing drug, administered as non-dosed powder in acute poisonings, is:

Activated charcoal
Magnesium sulfate
Sodium bicarbonate
Calcium carbonate
None of listed.

Respiratory arrest caused by the action of toxic gaseous agent needs the use of:

Lobeline
Nikethamide
Adrenalin
Salbutamol
Nitroglycerine.

If the urgent condition has caused collapse, it is necessary to use:

Mesatonum
Pentaminum
Corglyconum
Promedolum
Unithiolum.

Potassium preparations are used in all cases, except:

Hyperkalemia
Hypokalemia
Digitalis toxicity
Heart arrhythmia
Myastenia.

Combined preparation, containing potassium and magnesium salts of asparaginic acid, is:

Panangin
Co-trimoxazole
Papazol
Ampiox
Amoxiclav.

Calcium chloride has all effects, except:

Immune-suppressive
Anti-inflammatory
Anti-allergic
Hemostatic

Anti-toxic.

Magnesium sulfate after the oral administration is:

Laxative

Osmotic diuretic

Anti-hypertensive drug

Anticonvulsant

Antacid.

Magnesium sulfate after the injection acts as:

Anti-hypertensive drug

Laxative

Antacid

Stimulant of bile secretion

Emetic.

Sodium bicarbonate administered orally may cause:

Neutralization of acid in the stomach with formation of carbon dioxide

Laxative action

Constipation

Antacid action without the formation of carbon dioxide

Inhibition of gastric secretion.

Calcium chloride for resorbative action on the body is administered:

By intravenous injection

By inhalation

By intramuscular injection

By subcutaneous injection

By topical application.

A patient with infective disease had vomiting and loose stool. A result was a loss of water and hyponatremia. Which solution should be used for correction of water-electrolyte balance in this patient?

0,9% solution of sodium chloride

10% solution of sodium chloride

5% solution of glucose

40% solution of glucose

4% solution of sodium bicarbonate.

Use of diuretic is complicated by hypokalemia. Which salt preparation must be used for prevention and treatment of this disorder in electrolyte balance?

Potassium chloride

Calcium chloride

Sodium chloride

Sodium bicarbonate

Magnesium oxide.

Magnesium salt is administered intravenously to stop the attack of convulsions. It is known that after the oral administration this drug acts as purgative. Which preparation is mentioned?

Magnesium sulfate

Magnesium oxide

Sodium chloride

Sodium bicarbonate
Potassium chloride.

A woman was taken into the hospital with rheumatic vasculitis. Salt preparation was prescribed to her with the goal to decrease the permeability of blood vessel wall and given intravenously because its injection into the soft tissues is complicated by necrosis. Which drug was used?

Calcium chloride
Calcium gluconate
Calcium glycerophosphate
Magnesium sulfate
Sodium chloride.

Blood test shows metabolic acidosis in a patient with hyperglycemic coma. Which solution should be used for restoration of normal acid-bases balance in blood?

4% solution of sodium bicarbonate
10% solution of calcium chloride
0,9% solution of sodium chloride
5% solution of glucose
25% solution of magnesium sulfate.

Acid, used as antiseptic, is:

Boric acid
Hydrochloride acid
Acetylsalicylic acid
Aminocaproic acid.
Solution of ammonia.

Acids are electrolytes, which dissociate with a formation of:

Ions of hydrogen
Ions of hydroxyl
Ions of metals
Molecules of water
Atoms of oxygen.

Hydrochloride acid as 2% solution is used for:

Replacing therapy in hypoacidic gastritis
Replacing therapy in chronic pancreatitis
Inhibition of gastric secretion
Neutralizing of gastric juice
Antiseptic action.

Acid, accidentally applied on the skin or mucous membrane, needs:

Neutralization by weak solution of alkali
Neutralization by weak solution of other acid
Neutralization by ethyl alcohol
Washing out by hot water
Washing out by cold water.

Bases are electrolytes which dissociate with formation of:

Ions of hydroxyl
Ions of hydrogen
Ions of metals

Molecules of water
Atoms of oxygen.

Alkali used for emergence help in syncope is:

Solution of ammonia
Sodium bicarbonate
Magnesium oxide
Sodium chloride
Calcium chloride.

Alkali, accidentally applied on the surface of skin or mucous membrane, needs:

Neutralization by weak solution of acid
Neutralization by weak solution of alkali
Neutralization by ethyl alcohol
Washing out by hot water
Washing out by cold water.

Sodium bicarbonate has such effects as:

All listed
Antacidic action
Expectorant action
Anti-arrhythmic action
Antiseptic and osmotic action.

Hypertonic solution of sodium chloride:

Is used topically for treatment of purulent wounds
Is used topically to irrigate cavities and eyes
Is administered intravenously for treatment of dehydration
Is administered intravenously for treatment of hypertension
Is administered intravenously for prevention of hypokalemia.

Solution for transfusion therapy in shock is:

Reopolyglucin
Neohemodesum
Lipofundin
Isotonic solution of sodium chloride
Hypertonic solution of sodium chloride.

Reopolyglycin is:

High molecular weight solution for maintenance of hemodynamics
Low molecular weight solution
Preparation from donor's plasma
Solution for correction of electrolyte balance
Solution with anti-toxic action.

Main indications for transfusion of Neohemodesum are:

Intoxications, sepsis, burn disease
Inability to oral nutrition, cachexia
Shock, hypotension
Dehydration, loss of water and sodium
Hypokalemia, intoxication with cardiac glycosides.

Lipofundin is used in:
Inability to oral nutrition
Shock
Dehydration
Hypokalemia,
Acidosis.

The drug which is hemodynamic blood plasma substitute:
Reopolyglucin
Lipofundin
Sodium chloride isotonic solution
Potassium chloride solution
Sodium bicarbonate solution.

The drug for transfusion therapy which has the most denominated detoxification properties:
Neohemodesum
Reopolyglucin
Lipofundin
Sodium chloride isotonic solution
Potassium chloride solution

Blood plasma substitute from the group of crystalloids for the treatment of dehydration and hyponatremia:
Sodium chloride isotonic solution
Glucose isotonic solution
Sodium bicarbonate solution
Neohemodesum
Reopolyglucin.

Solution for the management of acid-base balance in the body contains:
Sodium bicarbonate
Sodium chloride
Potassium chloride
Calcium chloride
Magnesium chloride.

Calcium chloride is used to treat the overdose of:
Magnesium sulfate
Sodium chloride
Sodium bicarbonate
Potassium chloride
None of listed.